1992 CROP

HARD RED SPRING WHEAT QUALITY REPORT

Physical, Chemical, Milling, and Baking Characteristics

United States Department of Agriculture
Agricultural Research Service
North Central Region

HARD RED SPRING WHEAT QUALITY REPORT

on samples received from the 1992 crop

Source:

Spring and Durum Wheat Quality Laboratory
USDA, Agricultural Research Service
Harris Hall, NDSU
Fargo, North Dakota 58105

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
in cooperation with
STATE AGRICULTURAL EXPERIMENT STATION

QUALITY EVALUATION OF HARD RED SPRING WHEAT CULTIVARS

1992 CROP[1/]

by

G.A. Hareland, L.A. Grant, A. Ostenson, W.J. Newell, W.J. Erickson, J.G. Wear, E. Winter[2/], and M. Skunberg[3/]

1/ This report represents cooperative investigations on the quality of Hard Red Spring Wheat Cultivars from the 1992 crop. Some of the results presented have not been sufficiently confirmed to justify varietal release. Confirmed results will be published through established channels. Cooperators submitting samples for analysis have been given analytical data on their samples prior to release of this report. This report is primarily a tool for use by cooperators and their official staff and to those individuals having direct and special interest in the development of agricultural research programs.

This report was compiled by the Agricultural Research Service, U. S. Department of Agriculture. Special acknowledgment is made to the North Dakota State University for use of their facilities and the services provided in support of these studies. The report is not intended for publication and should not be referenced in either literature citations or quoted in publicity and advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved.

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1992 COOPERATING AGENCIES AND STATIONS

The cooperative agencies and stations conducting the varietal plot and nursery experiments from which the 1992 spring wheat samples were received are listed below:

University of California, Davis

Imperial Valley

New York State College of Agriculture
and Life Science Cornell University

Ithaca

Minnesota Agricultural Experiment Station

Crookston, Morris, St. Paul

Montana Agricultural Experiment Station

Bozeman, Sidney

North Dakota Agricultural Experiment Station

Minot, Langdon, Dickinson, Williston,
Carrington, Prosper, Casselton

South Dakota Agricultural Experiment Station

Redfield, Brookings, Selby

Idaho Agricultural Experiment Station

Aberdeen

1992 COOPERATING AGENCIES AND STATIONS (cont.)

Wyoming Agricultural Experiment Station

Powell

Washington Agricultural Experiment Station

Pullman

Wisconsin Agricultural Experiment Station

Madison

A complete list of all cooperating agencies, stations, and personnel for the year will be found in the report by R. H. Busch, et al., Wheat Varieties Grown in Cooperative Plot and Nursery Experiments in the Spring Wheat Region in 1992.[4/]

4/ Busch, R. H. Wheat Varieties Grown in Cooperative Plot and Nursery Experiments in the Spring Wheat Region in 1992. Agricultural Research Service, U. S. Department of Agriculture and State Agricultural Experiment Station, St. Paul, MN.

INTRODUCTION

Samples of standard cultivars and new selections of hard red spring wheat grown in cooperative experiments in spring wheat regions of the United States are milled each year by the USDA/ARS, Wheat Quality Laboratory. Wheat and their corresponding flours are evaluated for physical and chemical properties, and the flours are baked to determine bread characteristics. The purpose of this report is to make available to the cooperators and other interested parties, quality data on the standard varieties and new selections of hard red spring wheat from the 1992 crop.

The same general format and techniques were used in evaluating the wheat as outlined in quality reports from previous years. The same computer scoring system has been used for the past several years, hence some faulting values differ slightly from earlier years. In general, data contained in this report are comparable to data in past reports. Statistical data is included for each cultivar and experimental line from the Uniform Regional Nurseries.

The evaluation of a wheat sample involves the analysis of kernel characteristics, milling performance, and baking performance. A brief description of testing methods employed is shown on pages 10 to 12 of this report. The various characteristics and any outstanding features or deficiencies of each cultivar are evaluated from results of these tests. No specific comments are made regarding mixogram patterns derived from samples. However, reference mixograms, shown on page 23, illustrate ranges from which sample mixograms may be compared.

SOURCE OF THE 1992 CROP SAMPLES

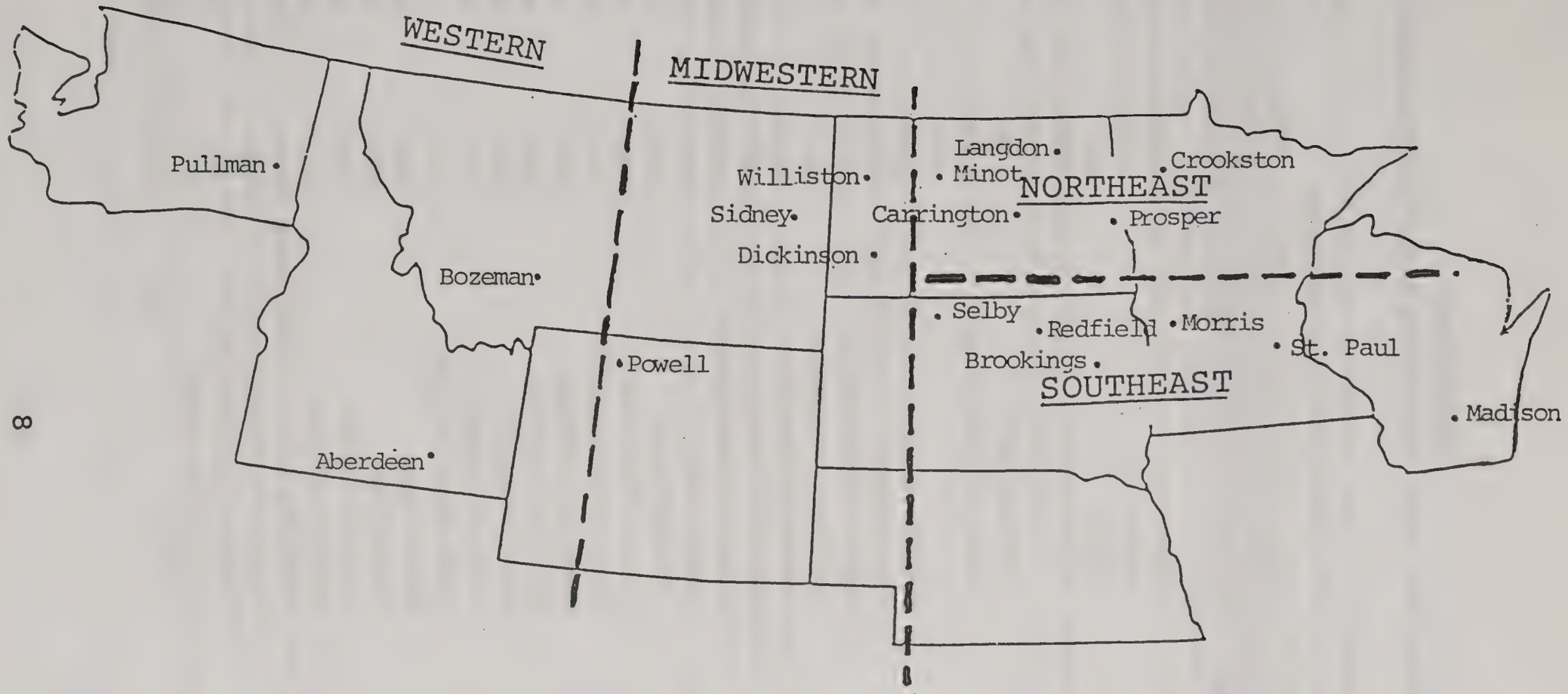
Tests were performed on 1969 samples which were received from 25 stations in 11 states. However, data on 1256 samples is excluded from this report, because the information was of interest only to plant breeders at specific experiment stations.

Data presented in this report represents the evaluation of spring wheats received from Field Plot Nurseries and Uniform Regional Nurseries. The following stations were cooperators:

California:	Imperial Valley
Idaho:	Aberdeen
Minnesota:	Crookston, Morris and St. Paul
Montana:	Bozeman, and Sidney
New York:	Ithaca
North Dakota:	Minot, Langdon, Dickinson, Prosper Williston, Carrington, and Casselton
South Dakota:	Redfield, Brookings and Selby
Washington:	Pullman
Wisconsin:	Madison
Wyoming:	Powell

UNIFORM REGIONAL NURSERY TRIALS

The geographical areas from which the samples were received are shown on page 8. Spring wheat cultivars and experimental lines included in the Uniform Regional Nursery trials are listed on page 9. The Western areas were comprised of three stations, the Midwestern areas four stations, the Northeastern area five stations, and the Southeastern area six stations. The geographical areas tend to represent the movement of wheat in the market. Contrary to previous reports which presented data on wheat blends from these geographical areas, samples tested from the 1992 crop were not blended. Included in this report is statistical data on quality factors of each cultivar or experimental line from each geographical location.



Georgraphical areas from which wheat samples were obtained.

ENTRIES IN
THE UNIFORM REGIONAL HARD RED SPRING WHEAT PERFORMANCE NURSERY

The 32 entries in the 1992 URHRSWPN are listed below:

Entry No.	Cross or Variety	CI No. or Selection No.	Year Entered	Source
1.	Marquis	3561	1929	Canada
2.	Chris	13751	1969	USDA-MN
3.	Era**	13986	1972	USDA-MN
4.	Stoa		1987	ND
5.	Butte 86		1987	ND
6.	SD3056	ND604/SD2971	1990	SD
7.	SD8072	SD8052/SD2971	1991	SD
8.	SD8073	" "	1991	SD
9.	SD8074	" "	1991	SD
10.	SD8070	Guard/Sharp	1992	SD
11.	MN88334**	MN84436/Vance	1991	USDA-MN
12.	MN88076**	MN84008/MN84606	1992	USDA-MN
13.	MN88415**	MN74103/SD8026	1992	USDA-MN
14.	MN89028**	MN84377/MN85048	1992	USDA-MN
15.	MN89408**	MN85437/MN84047	1992	USDA-MN
16.	ND671	Stoa's'/ND620	1991	ND
17.	ND673	Grandin/Stoa's'	1992	ND
18.	ND675**	Grandin*2/ND643	1992	ND
19.	ND681	Stoa//Butte*2/ND507	1992	ND
20.	ND682	Gus//Butte/ND590	1992	ND
21.	XW398A4**	MN7357/SD2903	1991	NDRF
22.	XW397A3**	MN7357/SD2881	1992	NDRF
23.	N87-0306**	HS81-0074/MN7357	1991	AGRIPRO
24.	N88-0022**	HS81-0074/MN7357	1992	AGRIPRO
25.	N88-3136	Sinton/Stoa	1991	AGRIPRO
26.	N88-3034	Sinton/Stoa	1991	AGRIPRO
27.	N86-0348**	HS81-0074/Alex	1992	AGROPRO
28.	MT8849	RS6880/MT7819	1992	MT
29.	BW148	BW83(ND499/RL4137)/ND585	1991	AGCAN
30.	BW150	Katepwa*6/RL 4509 (Lr21)	1992	AGCAN
31.	BW152	Katepwa/RL4509 (Lr21)	1992	AGCAN
32.	PH 986-61	MSFRSP/WB 906R	1992	WPB
33.	TR 983-239	MSFRSP	1992	WPB

** Semidwarf

METHODS

Following are terminologies and testing methods used in the evaluation process:

Test Weight Per Bushel - The weight per Winchester bushel of cleaned, dry wheat subsequent to passing the sample through a Carter-Day dockage tester.

1000-Kernel Weight - The weight of 1000 kernels was determined by counting, using a Seedburo seed counter, the number of kernels in 10 g samples of cleaned, hand-picked wheat.[5/]

Kernel Size - The percentages of the size of kernels (large, medium and small) were determined using a wheat sizer as described by Shuey[6/].

The sieves of the sizer were clothed as follows:

Top Sieve - Tyler #7 with 2.92 mm opening
Middle Sieve - Tyler #9 with 2.24 mm opening
Bottom Sieve - Tyler #12 with 1.65 mm opening

Milling - The samples were cleaned by passing the wheat through a Carter-Day dockage tester and through a modified Forster scourer (Model 6). The clean, dry samples were pretempered to 12.5% moisture for at least 72 hours, then tempered to 15.5% moisture and allowed to stand overnight prior to milling.

5/ Mention of a trademark name or a proprietary product does not constitute a guarantee or warranty of the product by the U. S. Department of Agriculture, and does not imply its approval to the exclusion of other products that may also be suitable.

6/ Shuey, William C. A Wheat Sizing Technique for Predicting Flour Milling Yield. Cereal Science Today 5:71-72,75 (1960).

The Uniform Regional Nursery spring wheat samples were milled in Brabender Quadrumat Senior mill heads. The stock from the Break head was sifted for 60 sec. on a strand sifter using #35 and #80 Tyler sieves. The throughs of the #80 sieve were classified as break flour; the overs of the #35 sieve classified as bran; and the overs of the #80 sieve were passed through the reduction head. The reduction stock was sifted for 45 sec. on a #80 Tyler sieve. The throughs were classified as reduction flour and the overs were shorts. The break and reduction flour we combined for the patent flour.

The Field Plot Nursery samples were milled on a Buhler continuous experimental mill. The Buhler mill had been slightly modified for better comparison with commerical milling operations. Break scalping sieves were clothed with #54 stainless steel wire. Reduction scalping sieves were clothed with #58, #66 and #105 stainless steel wire for the first, second and third reductions, respectively. All flour sieves were clothed with #135 stainless steel wire.

The six flour streams obtained from Buhler milled wheat were combined and represented patent flour. The extraction of a good milling wheat using this flow is approximately 68% and is comparable to a commercial "long patent" extraction flour. At a 68% flour extraction, changes in flour ash are most sensitive to changes in percent extraction.

Hardness Test - Wheat hardness scores are determined according to AACC Method 39-70A. The procedure involves grinding the wheat samples in a Udy grinder and obtaining reflectance data from a Technicon 450 near infrared analyzer. Wavelengths used were 1680 nm and 2230 nm. This procedure was developed by Mr. Karl Norris, USDA, Beltsville through a co-operative research project in which the Hard Red Spring and Durum Wheat Quality Laboratory also participated. Hard red spring wheats generally have scores between 60 and 85.

Protein Content - Wheat and flour proteins were determined from NIR reflectance data, the Kjeldahl procedure, or Leco Nitrogen determinations. Nitrogen values, as determined the Kjeldahl procedure or Leco, were multplied by 5.7 to calculate protein values.

Mineral or Ash Content - Wheat or flour ash was determined by measuring the residual weight of minerals remaining after incinerating the sample for approximately 16 hours at 575^{0}C. The results were reported as percentages of the sample weights.

Mixograph Analysis - Mixograms for each flour sample were determined by using 30 g of flour and adding 20 cc of water. The sensitivity spring setting was set at 10. All mixograms were run with constant weight of flour and volume of water. Absorptions reported were adjusted according to the peak heights of the mixograms. Correction factors were determined from a series of flours by varying the amount of absorption.

Mixogram Patterns - Reference mixogram patterns shown on page 24 illustrate the different types of mixograms that were obtained. A single number is assigned each pattern to characterize and simplify the classification of the curves. The larger numbers indicate stronger curve characteristics.

Baking Procedure and Formula - Following is the baking formula used:

100% flour	3% Non-fat Dry Milk
2% salt	3% yeast
5% sugar	2% shortening (Crisco, melted)

Samples were mixed to optimum dough development in National Manufacturing mixers, the micro mixer for 25 g samples and the 100 g special mixer for 100 g samples. Bromate (10 ppm) for oxidation and Fungal Amylase (Doh-Tone)(15SKB units) for enzymatic supplement were added to each sample. All doughs were moulded in a Roll-Er-Up moulder. Samples undergo 3 hour fermentation, 1 hour proof and 20 minute bake time.

Absorption - The amount of water, expressed as percent of flour, required for optimum dough consistency.

Crumb Color - A value was determined by comparing the crumb color of the tested sample with the crumb color of a baking standard. The standard flour was an equal blend of the variety Len grown at Casselton and Minot, ND, and Crookston, MN, and Brookings, SD.

Loaf Volume - The volume of the baked loaf as determined by rapeseed displacement.

All values (protein, ash and absorption) were reported on a 14% moisture basis.

DISCUSSION

The following discussion presents the basic techniques and criteria used in the quality evaluation of the Hard Red Spring Wheat cultivars. Evaluations are based on the categories of kernel characteristics, milling performance, and baking score.

Each evaluation category is important. For example, a sample could be of a sufficiently poor quality for a given category to suggest elimination from future testing. However, a sample submitted for the first time and found to be questionable should be tested again to confirm previous evaluations. A sample which is consistently rated as questionable should be discarded.

Five kernel characteristics (test weight, 1000 kernel weight, percent small kernels, wheat ash, and wheat protein) were independent variables used to calculate the dependent variable, wheat score. Four milling characteristics (percent extraction, ash content @ 65% extraction, flour protein, and milling character) were used to calculate the dependent variable, mill score. Seven characteristics (mixogram pattern, bake absorption, mixing time, dough characteristics, crumb color, crumb grain, and loaf volume) were used to calculate the dependent variable, bake score. These three dependent variables become independent variables used to calculate a dependent variable, the general evaluation, which is an overall general score.

The current computer program used by the Wheat Quality Laboratory was designed and implemented to perform the analysis and tabulation of data generated from each station. The program has been in operation for nine years and utilizes the Statistical Analysis Systems (SAS Institute, In., SAS Circle, Box 8000, Cary, NC 27511).[7/]

Wheat samples are tested and data collected on 18 quality factors or variables. The computer program then grades each factor against predetermined faulting values and assigns major (MJ) or minor (MI) faults where applicable. The data is then broken down into 3 major areas which relate more directly to agronomic, industrial, and consumer requirements. Each sample is assigned a score of 4 in the areas of Wheat Characteristics, Milling Characteristics, and Baking Characteristics. The program then adjusts the score (4 = Good promise, 3 = Some promise, 2 = Little promise, 1 = No promise) depending upon the number of major and/or minor faults assigned to that sample.

7/ Nolte, L.L., Youngs, V.L., Crawford, R.D., and Kunerth, W. H. 1985. Computer program evaluation of hard red spring wheat. Cereal Foods World 30:227-229.

A general score is a numerical score of 1-4 and is determined by calculating the mean of the other 3 scores - wheat characteristics, milling characteristics, and baking characteristics.

The following tables list the variables used in each scoring area and their specific faulting and scoring values.

WHEAT SCORE

Variables Included	Faulting Limits Minor	Faulting Limits Major	Effect on Score Minor	Effect on Score Major
Test Weight (#/bu)	57.9	56.9	-	-1
1000 Kernel Weight (g)	Mean-2.1	Mean-5.1	-	-1
Small Kernels (%)	8	18	-	-1
Wheat Ash (%)	1.71	1.81	-	-
Wheat Protein (%)	13.9	12.9	-1	-2

MILL SCORE

Variables Included	Faulting Limits Minor	Faulting Limits Major	Effect on Score Minor	Effect on Score Major
Flour Extraction[a/] (%)	Mean-2.1	Mean-4.1	-1	-2
Flr. Ash @ 65% Ex.[b/] (g)				
Large Samples	.47	.51	-	-1
Small Samples	.57	.61	-	-1
Flour Protein (%)	12.9	12.4	-1	-1
Milling Character[c/]	3	2	-1	-2

a/ The mean, or average, is calculated using the standards tested with that station.

b/ Large samples are milled on a Buhler experimental mill, and small samples are milled on a Quadrumat Jr. experimental mill. Different values are used to compensate for differences in the efficiency of the two mills and their respective procedures.

c/ 5 = Normal. 4 = Normal-soft. 3 = Soft-normal. 2 = Soft. 1 = Gritty. 0 = Very soft.

BAKE SCORE

Variables Included	Faulting Limits Minor	Faulting Limits Major	Effect on Score Minor	Effect on Score Major
Mixogram Pattern[a/]	2,7 or 8	1,or 9-11	-	-1
Bake Absorption (%)	61.9	60.4	-1	-2
Mix Time (min.)	5.75-8.00	over 8.00	-1	-2
	or	or		
	2.00-2.75	0-1.75	-1	-2
Dough Characteristic[b/]	6	4 or less	-	-2
Crumb Color[c/]	75	50 or less	-	-1
Crumb Grain[d/]	80	50 or less	-	-1
Loaf Volume[e/] (cc) Lg.	Mean-55	Mean-105	-1	-2
Sm.	Mean-21	Mean-31	-1	-2

a/ Refer to reference mixograms for numerical curve pattern. (1 = very weak, 11 = very strong)

b/ 9 = Elastic. 7 = Slightly pliable.
5 = Very pliable. 4 = Bucky
2 = Very, very pliable. 0 = Dead.

c/ 10.0 = Bright, white
8.0 = Soft, slightly creamy
6.0 = Creamy
4.0 = Very creamy
2.0 = Dull, very gray

d/ 10.0 = Close, elongated, and uniform cells; fine grain and thin walls; soft texture.
8.0 = Slightly open, elongated cells; fine grain and thin walls; soft texture.
6.0 = Open, elongated to round cells; fine grain and thick walls; slightly coarse texture.
4.0 = Open, round cells; coarse grain and thick walls; coarse to rough texture.
2.0 = Irregular, open and large cells; coarse grain and thick walls; rough or soggy texture.

e/ Average values are calculated using the standards tested with that station. "Lg." refers to the faulting and scoring values for 100 g. loaves. "Sm." refers to the faulting and scoring values for 25 g. (pup) loaves.

All samples were compared with a milling and baking standard representative of the crop year. Agronomic and climatic conditions of the individual locations can affect the quality of the wheat such that the evaluation of all samples, including commercial cultivars, harvested from these locations may be classified as questionable to unsatisfactory. Therefore, the evaluation ratings from one station may not be compared with ratings from other stations, but only provide a comparison within that station. For example, an area may produce low protein wheat with large and plump kernels, good milling performance, and good kernel characteristics, but with low flour protein and unsatisfactory baking performance such as short mixing time, low loaf volume, and weak dough characteristics. The wheat from this area could not be considered a strong spring wheat and would not maintain the quality expected from the spring wheat producing area. An acceptable variety should have tolerance to a wide range of environmental conditions.

Kernel Characteristics are important in determining the initial value of wheat. Poor kernel characterisitics could disqualify a new variety from further consideration. Because of the present wheat grading system, high test weight is desirable. Plump kernels are desirable because of their high ratio of endosperm to bran. Low 1000-kernel weight and small kernel size distribution affect milling performance due to their high ratio of bran to endosperm. Wheat ash is an important factor when comparing one cultivar against other standard cultivars. Wheat with a high mineral content may yield flour with a high ash content. Wheat protein quality and quantity must be considered as an important characteristic when comparing cultivars grown at the same location. Wheats with low protein values are undesirable since protein affects baking performance.

Milling Performance is a very important characteristic of spring wheats. Low extraction and high flour ash are major factors unacceptable under commercial milling operations. Flour mineral contents are reported at a constant extraction of 65% so that flour extraction rates among cultivars are easily compared. As a general rule, an increase of 0.01% in ash content is equivalent to an increase of approximately 2% in flour extraction.

Milling characteristics: Wheat comprising soft kernels requires different milling techniques when compared with wheat of uniform hard kernels. On commercial mills flowed for hard vitreous spring wheats, the introduction of soft wheats into the mill will result in milling problems. Likewise, a sample which is extremely hard and vitreous will mill differently. Both types of wheat (soft and vitreous) require different roll pressures, clothing, sifter surface, and temper to be milled properly. The blending of normal bread wheats with soft wheats or extremely hard, vitreous wheats is undesirable since they are not compatible in the milling operation. Normal to soft score indicates that the sample shows a tendency toward softness of character on the flour mill stocks and extraction. Adjustments would either have to be made in the milling flow or in tempering procedures to compensate for differences in kernel hardness. Properties of soft wheat may or may not be compatible with other wheats. Therefore, maintaining pure varieties with uniform milling characteristics is important.

The amount of protein recovered in flour from wheat is important. High protein wheats yielding low protein flours are not desirable. Such wheats would contain much of the protein distributed in the outer portion of the kernels resulting in excessive protein in the feed streams. Therefore, higher protein wheat would be necessary to yield a flour with protein content comparable to that of a wheat that yields optimum flour protein.

Mixogram Patterns are important in estimating the strength and mixing tolerance or potential mixing tolerance of a flour. From the standard mixogram patterns shown on page 23, patterns 6 - 8 indicate flours with optimum mixing tolerance and gluten strength. Mixogram patterns 9 - 11 indicate flour samples with long mixing times, and strong gluten characteristics, whereas, patterns 1 - 5 indicate flours with weak gluten characteristics and short mixing times. Both the pattern and length of the curve are important, and both must be considered in the evaluation. Abnormal curves, such as sway-back or long initial times to incorporate water, indicate undesirable characteristics.

Baking Evaluation takes into account the flour water absorption, mixing time, dough characteristics, loaf volume, crumb texture, and machinability. Flour samples with low water absorptions would be unsatisfactory. Samples with extremely short mixing times would relate to weak gluten characteristics and be considered undesirable. Samples evaluated in the minimal range for these values require further testing to determine whether definite deficiencies exist.

Doughs having mellow to weak properties show a tendency towards weakness. Doughs having mellow to strong properties show a tendency to be strong, whereas, doughs having strong to mellow properties show a tendency to be mellow. Since these characteristics are evaluated by subjective means, the tendencies are estimated which allows for double grades.

The crumb grain or appearance of the interior of the loaf shows how well the sample stood up during baking and may indicate some deficiencies which have been observed during the baking test. Crumb grain is likely related to gluten protein properties (quantity and quality).

Bread loaf volume indicates potential strength of doughs in a different manner than mixing time or dough characteristics. Optimum loaf volume demonstrates the capacity, or lack thereof, for the dough to expand under pressure and to contain the entrapped gases during expansion. Weak doughs are like balloons which burst when blown up. They tend to collapse and yield breads with low loaf volumes, or yield breads with extremely large volumes containing large holes in the interior. Low protein flours produce extensible doughs which exhibit properties similar to putty. These doughs do not expand adequately during fermentation or baking and thus produce bread with low loaf volumes. Tough and very bucky doughs are bound too tightly and impede expansion of the gases resulting in breads with low loaf volume. Loaf volume is a characteristic probably related to gluten functionality in the dough.

Statistical Data including mean, SD, minimum and maximum values, variance, and coefficient of variation are shown for each cultivar within the four geographical areas - Northeast, Southeast, Midwest, and West. This data provides information on the variability of each selection within the Uniform Regional Nurseries for each of the parameters measured.

UNIFORM REGIONAL NURSERY SAMPLES - 1992 CROP

Discussion of URN

A total of 599 URN samples were received from 18 stations in 8 states. Twenty-seven URN selections were experimental lines and the remainder were commercial cultivars. Along with the experimental lines, the cultivars Butte 86, Chris, Era, Marquis, and Stoa were included in the statistical analysis of the URN samples. Each sample was evaluated for kernel characteristics, milling performance, and baking properties. Some selections were not included in the baking evaluation because of poor kernel characteristics or rheological dough properties.

Data from the northeastern area were from five stations -- Prosper, Langdon, Minot, and Carrington, North Dakota, and Crookston, Minnesota. Quality data of the spring wheat cultivars and experimental lines is shown in Tables 1-5. Statistical data is shown on Tables 6-16.

Data from the southeastern area were from six stations -- Brookings, Redfield, and Selby, South Dakota, Morris and St. Paul, Minnesota, and Madison, Wisconsin. Quality data of the spring wheat cultivars and experimental lines is shown in Tables 17-22. Statistical data is shown on Tables 23-33.

Data from the midwestern area were from four stations -- Williston and Dickinson, North Dakota, Powell, Wyoming, and Sidney, Montana. Quality data of spring wheat cultivars and experimental lines is shown in Tables 34-37. Statistical data is shown on Tables 38-48. Powell, Wyoming was not baked do to poor quality and was not included in the statistical data.

Data from the western area are from three stations -- Bozeman, Montana, Aberdeen, Idaho, and Pullman, Washington. Quality data of spring wheat cultivars and experimental lines is shown in Tables 49-51. Statistical data is shown on Tables 52-62. Aberdeen, ID was not baked do to poor quality and was not included in the statistical data.

FIELD PLOT NURSERY SAMPLES - 1992 CROP

Sixty-one samples were received from two states at four stations. Quality data for the individual samples is shown in Tables 63-67.

Casselton, Langdon, Dickinson and Minot - North Dakota

Four commercial cultivars were received from Langdon, five from Casselton, and six from Minot. Data for these selections is shown in Tables 63-66. Len was used as the standard for comparison.

Imperial Valley - California

Thirty-nine selections were received from this station. Data for these samples is shown in Table 67. Yecora Rojo and Len were used as the standards for comparison.

EXPLANATION OF ABBREVIATIONS LISTED UNDER THE HEADINGS AND THOSE THAT MAY BE LISTED UNDER MINOR AND MAJOR DEFICIENCIES ON COMPUTER PRINTOUT

TW = Test Weight
KW = 1,000 Kernel Weight
LG = Large Kernels
SM = Small Kernels

WHT ASH = Wheat Ash
WP; WHT PRO = Wheat Protein
EX = Flour Extraction
A65 = Ash at 65% Flour Extraction

FP; FLR PRO = Flour Protein
MC; MILL CHAR = Milling Characteristics
MIX ABS = Mixograph Absorption

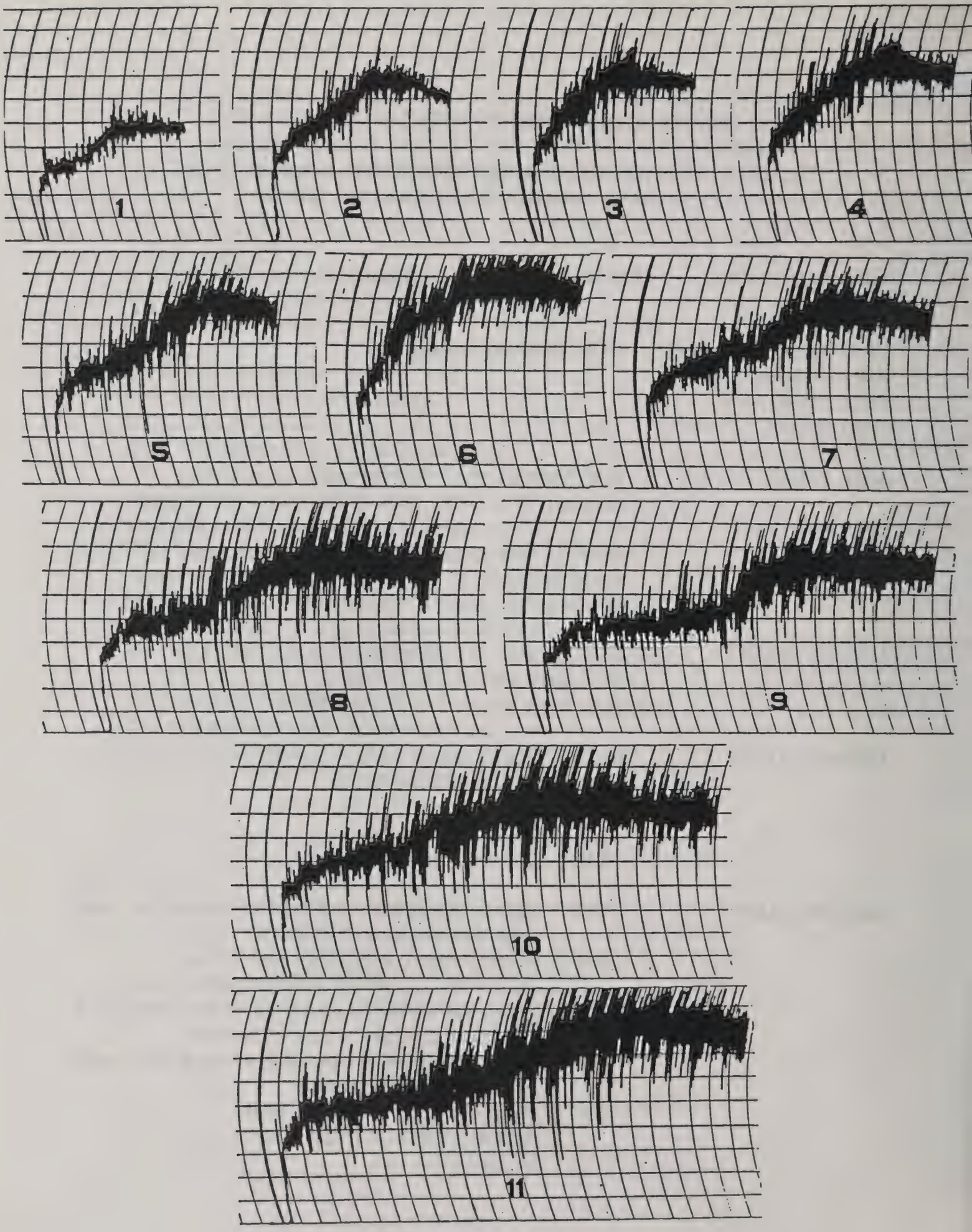
MX: MIX PAT = Mixograph Pattern Score
BA; BAKE ABS = Actual Bake Absorption
MT: MIX TIME = Actual Dough Mixing Requirements

DC; DOUGH CHAR = Dough Handling Characteristics
CC; CRUMB COLOR = Standard 8.0
CG; CRUMB GRAIN = Standard 8.0
LV; LOAF VOL = Loaf Volume

FOOTNOTES FOR TABLES

These footnotes are applicable for specified column headings in all tables that follow

Column Heading	Footnote
WHT ASH, WHT PRO, ASH @ 65%, FLR PRO, BAKE ABS (100 G loaf)	14% Moisture basis.
MILL CHAR	5 = Normal. 4 = Normal-soft. 3 = Soft-normal. 2 = Soft. 1 = Gritty. 0 = Very soft.
MIX PAT	Refer to reference mixograms for numerical curve pattern. (1 = Very weak - - - 11 = Very strong.)
DOUGH CHAR	9 = Elastic. 7 = Slightly pliable. 5 = Very pliable. 4 = Bucky. 2 = Very, very pliable. 0 = Dead.
CRUMB COLOR	10.0 = Bright, white 8.0 = Soft, slightly creamy 6.0 = Creamy 4.0 = Very creamy 2.0 = Dull, very gray
CRUMB GRAIN	10.0 = Close, elongated, and uniform cells; fine grain and thin walls; soft texture. 8.0 = Slightly open, elongated cells; fine grain and thin walls; soft texture. 6.0 = Open elongated to round cells; fine grain and thick walls; slightly coarse texture. 4.0 = Open round cells; coarse grain and thick walls; coarse to rough texture. 2.0 = Irregular open and large cells, coarse grain and thick walls; rough or soggy texture.


1
2
3
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11

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=PROSPER NURSERY=UNIFORM

TABLE 1

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		59.2	26.4	27	2	1.81	13.9	78	3	65.5	0.51	12.9	5	2	58.6	2
CHRIS		59.6	24.9	24	6	1.57	14.8	80	4	70.8	0.41	14.2	5	4	59.0	3
ERA	S	55.0	22.1	8	10	1.86	13.8	81	1	66.6	0.52	13.0	5	4	59.0	3
STOA	S	59.1	27.5	19	3	1.74	13.9	77	3	68.8	0.41	13.3	5	4	60.3	4
BUTTE 86	S	60.8	33.7	60	0	1.59	13.9	92	3	69.8	0.40	13.0	5	4	60.0	3
SD 3056		60.1	33.8	58	0	1.73	14.4	94	4	68.6	0.49	13.3	5	4	59.6	2
SD 8072		61.4	34.2	66	1	1.65	14.0	95	4	70.4	0.44	13.0	5	4	59.0	2
SD 8073		60.6	33.7	63	0	1.68	13.6	83	3	69.1	0.46	12.7	5	3	62.5	4
SD 8074		60.3	31.4	56	0	1.69	14.1	92	4	68.8	0.45	13.2	5	4	61.1	5
SD 8070		62.0	35.5	59	1	1.57	13.4	84	3	70.4	0.40	12.3	5	2	59.0	4
MN 88334		60.4	28.2	33	2	1.47	13.1	79	3	70.3	0.39	12.1	5	2	57.6	5
MN 88076		59.8	31.9	55	1	1.62	13.5	86	3	70.3	0.41	12.1	5	2	59.0	4
MN 88415		61.2	37.7	62	0	1.60	13.2	86	3	70.0	0.44	12.5	5	3	57.9	2
MN 89028		61.1	34.5	58	0	1.63	13.3	81	3	69.6	0.41	12.2	5	2	59.0	2
MN 89408		56.5	25.9	16	6	1.91	14.1	87	3	66.1	0.56	12.6	5	2	59.6	4
ND 671		63.4	33.6	58	0	1.66	14.2	92	4	69.8	0.38	13.5	5	4	61.1	3
ND 673		62.6	38.2	71	0	1.59	14.0	85	4	70.8	0.38	13.3	5	4	61.8	4
ND 675		61.5	32.6	56	0	1.66	15.0	88	4	69.4	0.44	14.5	5	4	65.1	6
ND 681		60.5	33.1	53	0	1.62	14.0	85	4	68.9	0.39	13.4	5	4	61.1	4
ND 682		62.6	34.1	50	2	1.66	13.6	85	3	67.8	0.41	12.4	5	2	61.4	4
XW 398A4		60.3	29.7	26	2	1.85	13.5	76	3	67.8	0.53	12.8	5	3	60.5	3
XW 397A3		57.6	25.9	19	4	1.85	14.4	102	4	67.9	0.53	13.2	5	4	60.0	3
N87-0306		59.7	32.2	41	2	1.75	13.8	89	3	68.8	0.43	13.0	5	4	60.5	4
N88-0022		59.4	28.8	41	1	1.80	13.9	75	3	66.8	0.47	13.1	5	4	60.0	2
N88-3136		61.0	30.8	46	0	1.74	13.3	77	3	69.1	0.44	13.0	5	4	58.2	2
N88-3034		58.3	27.2	20	2	1.91	15.0	78	4	68.9	0.46	14.5	5	4	60.3	3
N86-0348		59.0	25.5	23	3	2.03	13.7	76	3	67.2	0.51	12.9	5	3	58.6	2
MT 8849		58.8	29.2	32	3	1.73	13.2	91	3	66.9	0.47	12.1	5	2	55.0	2
BW 148		60.1	28.7	43	2	1.76	14.9	96	4	70.2	0.43	14.1	5	4	59.3	3
BW 150		60.8	31.0	47	0	1.61	14.3	99	4	67.9	0.45	13.2	5	4	56.5	2
BW 152		61.4	33.4	48	2	1.55	15.0	95	4	69.7	0.46	13.9	5	4	56.5	2
PH 986-61		40.6	17.8	0	46	2.32	15.1	71	1	58.1	0.63	15.0	4	1	59.6	7
TR 983-239		55.1	25.7	8	6	2.05	14.6	84	3	64.3	0.58	13.9	5	3	60.5	4

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=PROSPER NURSERY=UNIFORM

TABLE 1 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		58.6	3.25	7	8.5	9.5	200	2	2.3				MI	MI		MI		MI	MJ					
CHRIS		59.0	3.50	7	8.5	9.0	192	2	3.3		MI								MJ					
ERA	S	59.0	4.00	7	8.0	8.5	204	2	2.3	MJ	MJ	MI	MI						MJ					
STOA	S	60.3	4.00	7	8.0	8.5	203	2	3.0				MI						MJ					
BUTTE 86	S	60.0	3.50	7	8.0	9.0	188	2	3.0				MI						MJ					
SD 3056		59.6	3.50	7	8.0	9.0	198	2	3.3									MI	MJ					
SD 8072		59.0	3.50	7	8.0	9.0	189	2	3.3									MI	MJ					
SD 8073		62.5	3.50	7	8.0	8.5	190	4	3.3				MI			MI								
SD 8074		61.1	5.00	7	8.0	8.0	195	3	3.7										MI					
SD 8070		59.0	4.50	7	8.5	9.0	205	2	2.3				MI			MJ			MJ					
MN 88334		57.6	3.50	5	8.0	8.5	179	2	2.3				MI			MJ			MJ		MI			
MN 88076		59.0	5.00	7	8.5	8.5	199	2	2.3				MI			MJ			MJ					
MN 88415		57.9	5.00	5	9.5	9.0	185	2	2.7				MI			MI		MI	MJ		MI			
MN 89028		59.0	4.00	5	8.5	8.0	196	2	2.3				MI			MJ		MI	MJ		MI			
MN 89408		59.6	4.50	7	8.0	9.0	203	2	2.3	MJ				MI		MI			MJ					
ND 671		61.1	3.25	7	9.0	9.0	202	3	3.7										MI					
ND 673		61.8	4.25	9	8.5	8.0	203	3	3.7										MI					
ND 675		65.1	5.00	9	8.5	8.5	213	4	4.0															
ND 681		61.1	3.75	9	8.5	8.0	210	3	3.7										MI					
ND 682		61.4	3.75	7	8.5	8.5	186	3	2.7				MI			MJ			MI					
XW 398A4		60.5	4.50	9	8.5	9.0	219	3	3.0				MI			MI			MI					
XW 397A3		60.0	4.00	9	8.0	8.5	205	2	3.3	MI									MJ					
N87-0306		60.5	4.50	9	8.5	8.0	217	3	3.3				MI						MI					
N88-0022		60.0	4.00	7	8.5	8.5	209	2	3.0				MI					MI	MJ					
N88-3136		58.2	4.25	7	8.5	8.5	207	2	3.0				MI					MI	MJ					
N88-3034		60.3	3.50	9	8.5	8.0	224	2	3.3									MI	MJ					
N86-0348		58.6	3.00	5	8.5	8.0	199	2	2.7		MI		MI			MI		MI	MJ		MI			
MT 8849		55.0	8.00	2	8.5	8.5	189	1	2.0				MI			MJ		MI	MJ	MI	MJ			
BW 148		59.3	3.25	7	8.5	9.0	191	2	3.3										MJ					
BW 150		56.5	3.50	5	8.5	8.0	190	2	3.3									MI	MJ		MI			
BW 152		56.5	2.75	5	8.5	8.5	187	1	3.0									MI	MJ	MI	MI			
PH 986-61		59.6	6.50	9	8.5	8.0	227	1	1.0	MJ	MJ	MJ		MJ	MJ			MI	MJ	MI				
TR 983-239		60.5	4.00	7	8.5	9.5	202	3	3.0	MJ				MI	MI				MI					

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	25.7	8	13.9	66.3	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	7.5	7.5	177
MAJOR FAULTING VALUES	56.9	22.7	18	12.9	64.3	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	5.0	5.0	167

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=LANGDON NURSERY=UNIFORM

TABLE 2

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		59.8	31.0	48	0	1.42	13.7	84	3	68.6	0.43	12.9	5	3	60.3	4
CHRIS		59.5	30.0	40	0	1.33	14.3	77	4	67.3	0.38	13.8	5	3	57.9	4
ERA	S	59.0	28.6	30	1	1.39	12.7	86	2	69.2	0.45	11.6	5	2	56.2	2
STOA	S	60.3	34.5	53	0	1.39	13.9	90	3	69.3	0.39	13.3	5	4	59.6	4
BUTTE 86	S	60.6	36.9	69	0	1.40	14.3	86	4	72.2	0.38	13.4	5	4	59.6	3
SD 3056		59.5	37.0	74	0	1.45	14.1	92	4	68.4	0.45	13.1	5	4	60.0	3
SD 8072		60.1	37.9	75	0	1.41	13.8	88	3	68.8	0.41	13.0	5	4	58.2	3
SD 8073		59.4	34.0	61	0	1.41	13.4	83	3	69.8	0.44	12.6	5	3	59.0	4
SD 8074		60.5	35.1	68	0	1.43	14.3	89	4	68.9	0.41	13.5	5	4	58.2	4
SD 8070		60.8	36.6	65	0	1.34	13.9	82	3	69.8	0.37	13.0	5	4	58.2	3
MN 88334		58.7	29.9	33	0	1.39	13.6	80	3	70.1	0.37	12.8	5	3	56.9	2
MN 88076		59.3	33.0	60	0	1.42	13.9	81	3	71.3	0.40	12.6	5	3	58.2	3
MN 88415		60.1	36.0	54	0	1.41	13.8	83	3	67.6	0.40	12.9	5	2	58.2	3
MN 89028		59.8	34.7	56	1	1.37	13.5	80	3	69.1	0.40	12.8	5	3	59.6	3
MN 89408		56.8	28.1	26	3	1.46	13.6	96	1	65.9	0.50	12.3	5	1	57.6	3
ND 671		61.3	35.6	65	1	1.47	15.2	78	4	68.3	0.36	14.7	5	4	59.3	5
ND 673		60.9	37.0	70	1	1.41	13.9	85	3	68.8	0.38	13.3	5	4	57.6	4
ND 675		61.4	37.9	74	0	1.43	15.3	94	4	68.9	0.42	14.6	5	4	59.6	5
ND 681		60.2	38.3	75	0	1.47	15.8	87	4	69.4	0.38	15.4	5	4	61.1	4
ND 682		62.0	35.5	52	0	1.42	13.6	80	3	68.8	0.39	12.9	5	3	57.3	4
XW 398A4		60.4	37.7	64	0	1.42	13.3	78	3	67.8	0.43	12.4	5	1	57.3	3
XW 397A3		59.9	32.4	49	1	1.36	13.9	99	3	70.7	0.41	12.4	5	2	57.3	3
N87-0306		59.4	34.5	57	1	1.36	13.5	83	3	69.6	0.39	12.9	5	3	61.4	4
N88-0022		59.7	35.5	69	0	1.41	13.6	76	3	68.8	0.40	12.8	5	3	59.6	3
N88-3136		59.9	32.1	50	2	1.48	13.8	73	3	71.6	0.39	13.3	5	4	58.6	4
N88-3034		58.2	31.9	48	0	1.61	15.2	81	4	70.2	0.44	14.8	5	4	59.3	3
N86-0348		58.6	31.1	48	0	1.44	13.6	77	3	68.8	0.44	12.7	5	3	59.3	3
MT 8849		59.6	35.5	64	0	1.44	13.9	89	3	70.2	0.41	13.0	5	4	57.6	4
BW 148		60.9	34.5	68	0	1.49	15.0	87	4	72.7	0.38	14.6	5	4	60.0	4
BW 150		60.5	33.6	54	0	1.34	14.2	91	4	71.8	0.37	13.6	5	4	56.9	3
BW 152		60.0	33.0	52	0	1.34	14.6	88	4	71.4	0.38	14.2	5	4	55.0	3
PH 986-61		55.9	32.8	31	1	1.55	13.5	66	2	67.6	0.47	13.2	5	3	57.6	4
TR 983-239		58.7	36.6	49	0	1.54	13.4	69	3	68.6	0.46	12.6	5	3	60.5	3

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=LANGDON NURSERY=UNIFORM

TABLE 2 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		62.3	3.75	7	8.0	9.0	184	4	3.3		MI		MI			MI								
CHRIS		57.9	3.75	5	8.5	8.0	164	2	3.0		MI			MI					MJ		MI			
ERA	S	56.2	4.75	5	8.0	8.0	180	2	2.0		MI		MJ			MJ		MI	MJ		MI			
STOA	S	59.6	5.25	7	8.5	8.0	182	2	3.0				MI						MJ					
BUTTE 86	S	59.6	4.50	7	8.5	9.0	170	2	3.3										MJ					
SD 3056		60.0	4.25	7	8.0	9.0	191	2	3.3										MJ					
SD 8072		58.2	4.25	5	8.0	9.0	170	2	3.0				MI						MJ		MI			
SD 8073		59.0	5.00	5	7.5	7.0	166	2	2.7				MI			MI			MJ		MI	MI		MI
SD 8074		62.2	5.25	7	8.0	7.5	180	4	4.0															MI
SD 8070		58.2	4.25	7	8.5	8.0	179	2	3.0				MI						MJ					
MN 88334		56.9	3.25	5	8.0	8.0	170	2	2.7		MI		MI			MI		MI	MJ		MI			
MN 88076		58.2	4.00	7	8.0	8.0	180	2	2.7				MI			MI			MJ					
MN 88415		58.2	4.00	5	8.0	8.0	178	2	2.3				MI	MI		MI			MJ		MI			
MN 89028		59.6	3.75	7	8.0	9.0	182	2	2.7				MI			MI			MJ					
MN 89408		57.6	4.75	5	8.5	7.5	181	2	1.3	MJ	MJ		MI	MJ		MJ			MJ		MI			MI
ND 671		59.3	4.25	9	8.5	8.5	190	2	3.3										MJ					
ND 673		57.6	6.00	7	8.5	8.0	178	1	2.7				MI						MJ	MI				
ND 675		59.6	5.50	9	8.0	7.5	186	2	3.3										MJ					MI
ND 681		63.1	4.25	9	8.0	8.0	195	4	4.0															
ND 682		57.3	5.75	2	8.5	9.0	169	1	2.3				MI			MI			MJ	MI	MJ			
XW 398A4		57.3	4.75	7	8.5	9.5	192	2	2.0				MI	MI		MJ			MJ					
XW 397A3		59.3	4.75	7	8.0	8.0	180	2	2.3				MI			MJ			MJ					
N87-0306		61.4	4.50	9	8.5	8.0	194	3	3.0				MI			MI			MJ					
N88-0022		59.6	3.75	9	8.0	8.5	200	2	2.7				MI			MI			MJ					
N88-3136		58.6	5.50	9	8.5	8.0	194	2	3.0				MI						MJ					
N88-3034		59.3	4.50	9	8.0	8.0	202	2	3.3										MJ					
N86-0348		61.3	3.75	7	8.0	8.0	193	3	3.0		MI		MI			MI			MI					
MT 8849		59.6	6.75	7	8.0	8.0	190	1	2.7				MI						MJ	MI				
BW 148		60.0	4.00	7	8.0	7.5	173	2	3.3										MJ					MI
BW 150		56.9	4.00	7	8.0	8.0	190	2	3.3										MJ					
BW 152		55.0	3.75	5	8.0	7.5	178	2	3.3										MJ		MI			MI
PH 986-61		57.6	5.75	9	8.0	7.5	206	1	2.0	MJ			MI	MI					MJ	MI				MI
TR 983-239		60.5	4.00	5	8.5	8.5	181	3	3.0				MI			MI			MI		MI			

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	31.2	8	13.9	68.1	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	7.5	7.5	156
MAJOR FAULTING VALUES	56.9	28.2	18	12.9	66.1	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	5.0	5.0	146

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=MINOT NURSERY=UNIFORM

TABLE 3

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		60.6	35.2	73	1	1.27	14.2	81	4	67.8	0.44	13.8	5	3	61.4	2
CHRIS		62.2	34.8	69	0	1.27	15.3	85	3	68.8	0.38	14.6	5	4	64.7	3
ERA	S	60.2	36.2	78	0	1.41	13.3	86	3	70.2	0.46	12.6	5	3	59.3	2
STOA	S	62.8	39.8	78	0	1.35	15.0	95	4	70.5	0.38	14.8	5	4	62.7	3
BUTTE 86	S	63.8	43.7	79	0	1.28	15.0	100	4	70.4	0.36	14.3	5	4	62.1	2
SD 3056		62.2	44.4	89	0	1.45	16.2	99	4	68.4	0.45	15.9	5	4	63.4	2
SD 8072		62.6	42.2	86	0	1.38	15.2	98	4	70.4	0.41	14.9	5	4	61.1	2
SD 8073		63.7	43.7	87	0	1.33	14.8	91	4	69.8	0.40	14.2	5	4	61.4	2
SD 8074		63.0	37.7	77	0	1.37	15.6	90	4	68.6	0.39	15.2	5	4	61.1	4
SD 8070		61.6	40.0	77	0	1.48	15.5	93	4	68.4	0.41	15.1	5	4	62.1	2
MN 88334		61.3	37.9	73	0	1.32	14.5	84	4	69.1	0.37	14.3	5	4	60.0	2
MN 88076		61.4	42.4	89	0	1.41	15.5	97	4	69.1	0.40	14.8	5	4	63.7	2
MN 88415		62.1	42.0	78	0	1.46	15.2	91	4	67.8	0.39	14.9	5	3	60.8	2
MN 89028		60.1	42.6	84	0	1.42	15.6	86	4	67.6	0.43	15.0	5	3	62.7	2
MN 89408		62.6	39.1	79	0	1.30	14.0	101	4	69.1	0.44	12.8	5	3	61.4	2
ND 671		63.8	38.8	74	0	1.46	16.0	94	4	69.1	0.37	15.9	5	4	66.1	4
ND 673		63.0	43.1	81	0	1.34	15.3	100	4	68.9	0.38	14.9	5	4	64.0	4
ND 675		63.0	45.0	87	0	1.30	16.4	89	4	69.3	0.41	16.4	5	4	65.7	5
ND 681		61.7	40.2	73	0	1.38	15.7	91	4	69,2	0.38	15.7	5	4	66.1	4
ND 682		62.2	41.7	74	0	1.46	15.4	87	4	65.0	0.40	14.8	5	2	62.1	3
XW 398A4		63.1	44.8	84	0	1.34	14.8	82	4	65.9	0.42	14.5	5	2	63.4	4
XW 397A3		61.8	43.7	84	0	1.38	15.8	113	4	69.7	0.44	14.8	5	4	61.1	3
N87-0306		61.0	42.6	82	0	1.54	15.0	90	4	68.3	0.40	14.5	5	4	66.1	3
N88-0022		62.5	45.8	89	0	1.30	14.5	88	4	66.3	0.39	13.7	5	3	62.5	2
N88-3136		63.4	38.3	76	0	1.37	15.0	89	4	68.1	0.38	15.0	5	3	62.1	3
N88-3034		60.5	36.5	67	0	1.57	16.3	88	4	67.4	0.38	16.2	5	3	62.5	2
N86-0348		61.6	38.0	78	0	1.37	14.8	81	4	64.3	0.42	14.6	5	2	63.1	3
MT 8849		61.3	41.3	76	0	1.37	14.5	89	4	63.4	0.44	13.8	5	2	62.1	5
BW 148		62.2	39.5	79	0	1.51	16.4	103	4	67.1	0.39	16.0	5	3	64.4	3
BW 150		60.9	37.5	70	0	1.37	15.9	100	4	65.4	0.39	15.8	5	2	59.0	2
BW 152		61.8	36.6	70	0	1.44	16.0	94	4	65.8	0.39	15.2	5	2	60.8	2
PH 986-61		61.4	43.7	79	0	1.38	13.7	73	3	62.0	0.44	13.5	5	2	60.8	4
TR 983-239		63.1	51.8	90	0	1.44	14.9	75	4	63.6	0.43	14.3	5	2	62.7	3

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=MINOT NURSERY=UNIFORM

TABLE 3 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		61.4	3.00	9	8.5	8.0	213	3	3.3	MI				MI				MI	MI					
CHRIS		64.7	3.00	9	8.0	7.5	222	4	3.7	MJ														MI
ERA	S	59.3	3.00	9	8.0	8.0	204	2	2.7	MI		MI				MI		MI	MJ					
STOA	S	62.7	4.00	7	8.0	8.0	213	4	4.0															
BUTTE 86	S	62.1	3.00	7	8.0	7.5	204	4	4.0									MI						MI
SD 3056		63.4	3.00	7	8.5	8.0	218	4	4.0									MI						
SD 8072		61.1	3.00	7	8.0	8.0	202	3	3.7									MI	MI					
SD 8073		61.4	3.50	7	8.0	7.5	204	3	3.7									MI	MI					MI
SD 8074		61.1	4.25	9	8.0	8.0	198	3	3.7	MI									MI					
SD 8070		62.1	3.00	7	8.0	7.5	222	4	4.0									MI						MI
MN 88334		60.0	2.25	7	8.0	8.0	189	1	3.0									MI	MJ	MI				
MN 88076		63.7	3.00	9	8.5	7.5	220	4	4.0									MI						MI
MN 88415		60.8	3.00	7	8.5	9.0	197	3	3.3					MI				MI	MI					
MN 89028		62.7	2.00	7	8.0	8.0	222	3	3.3					MI				MI		MI				
MN 89408		61.4	3.75	7	8.0	8.0	202	3	3.3							MI		MI	MI					
ND 671		66.1	3.75	9	9.0	7.5	224	4	4.0															MI
ND 673		64.0	4.00	9	8.5	7.5	213	4	4.0															MI
ND 675		65.7	4.00	9	9.0	8.0	223	4	4.0															
ND 681		66.1	3.50	9	8.5	8.0	223	4	4.0															
ND 682		62.1	2.50	7	8.5	8.0	197	3	3.0					MJ						MI				
XW 398A4		63.4	4.50	9	8.5	7.0	208	4	3.3					MJ										MI
XW 397A3		61.1	3.00	9	8.5	8.0	221	3	3.7										MI					
N87-0306		66.1	3.00	9	8.5	7.5	218	4	4.0															MI
N88-0022		62.5	3.00	9	8.5	8.5	210	4	3.7					MI				MI						
N88-3136		62.1	3.50	9	8.0	7.5	222	4	3.7					MI										MI
N88-3034		62.5	3.00	7	8.0	7.0	218	4	3.7	MI				MI				MI						MI
N86-0348		63.1	3.25	9	8.0	8.0	214	4	3.3					MJ										
MT 8849		62.1	5.50	9	8.0	8.0	211	4	3.3					MJ										
BW 148		64.4	2.50	9	8.5	8.0	213	3	3.3					MI						MI				
BW 150		59.0	2.50	7	8.0	8.0	210	1	2.3	MI				MJ				MI	MJ	MI				
BW 152		60.8	2.25	7	8.0	8.0	201	2	2.7	MI				MJ				MI	MI	MI				
PH 986-61		60.8	5.50	7	8.0	8.5	212	3	2.7			MI		MJ					MI					
TR 983-239		62.7	3.25	9	8.5	9.0	212	4	3.3					MJ										

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)	DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	37.8	8	13.9	68.3	.57	12.9	3	2,7,8	61.9	5.75-8.00 2.00-2.75	6	7.5	7.5	186
MAJOR FAULTING VALUES	56.9	34.8	18	12.9	66.3	.61	12.4	2	1,9-11	60.4	UNDER 1.75 OVER 8.00	4	5.0	5.0	176

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=CARRINGTON NURSERY=UNIFORM

TABLE 4

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		59.4	31.0	56	2	1.36	15.0	74	4	67.3	0.47	13.9	5	3	58.2	2
CHRIS		59.3	31.6	51	2	1.33	15.5	65	4	69.0	0.44	14.8	5	4	60.5	3
ERA	S	60.0	31.9	51	2	1.29	13.9	67	3	70.2	0.45	12.6	5	3	55.3	2
STOA	S	61.0	32.4	47	1	1.38	15.1	78	4	68.5	0.39	14.2	5	4	59.6	3
BUTTE 86	S	62.6	40.0	75	0	1.33	16.2	84	4	69.7	0.37	15.2	5	4	62.1	4
SD3056		62.0	41.0	80	1	1.46	16.6	95	4	68.3	0.46	15.9	5	4	62.1	3
SD8072		62.8	39.1	77	1	1.41	16.1	87	4	70.8	0.42	15.4	5	4	60.3	3
SD8073		62.4	38.2	72	1	1.42	15.4	82	4	69.5	0.41	14.3	5	4	60.8	3
SD8074		62.2	34.0	59	1	1.32	16.1	82	4	67.5	0.43	15.2	5	4	63.4	5
SD8070		62.8	37.5	66	1	1.35	15.9	85	4	68.5	0.39	14.9	5	4	62.7	4
MN88334		60.8	32.6	47	1	1.33	14.8	58	4	68.9	0.40	13.5	5	4	59.3	3
MN88076		60.9	38.0	75	0	1.36	15.7	77	4	69.3	0.42	14.6	5	4	60.0	3
MN88415		62.0	38.8	61	0	1.30	15.3	81	4	67.6	0.41	14.4	5	4	60.3	3
MN89028		61.9	36.8	65	1	1.33	15.5	76	4	67.7	0.41	14.6	5	4	61.8	3
MN89408		60.9	33.7	50	2	1.31	14.4	86	4	68.9	0.46	12.7	5	3	58.2	3
ND671		62.4	37.0	65	1	1.41	16.9	78	4	68.3	0.39	16.7	5	4	65.7	5
ND673		62.4	38.8	70	1	1.30	15.5	74	4	69.3	0.42	14.7	5	4	61.1	5
ND675		62.2	38.8	73	1	1.37	16.7	83	4	69.2	0.46	16.4	5	4	63.7	6
ND681		62.2	36.6	61	0	1.30	15.8	72	4	70.1	0.37	15.3	5	4	60.0	4
ND682		63.0	36.6	59	1	1.33	15.5	77	4	67.5	0.41	14.5	1	2	62.1	4
XW398A4		61.9	38.9	61	1	1.40	15.3	66	4	66.6	0.46	14.6	5	3	60.0	4
XW397A3		62.1	37.9	71	0	1.38	16.4	99	4	69.2	0.43	14.9	5	4	59.3	3
N87-0306		61.7	39.7	72	0	1.26	15.2	76	4	67.8	0.39	14.3	5	4	61.1	4
N88-0022		62.2	41.5	83	0	1.28	15.2	64	4	67.5	0.41	14.1	5	4	58.2	3
N88-3136		62.0	34.5	60	1	1.36	15.4	64	4	68.7	0.41	14.4	5	4	62.1	4
N88-3034		59.0	31.2	40	2	1.52	16.1	69	4	69.0	0.43	15.8	5	4	62.5	3
N86-0348		60.1	33.4	59	0	1.37	15.1	61	4	64.6	0.43	14.3	5	2	60.0	4
MT8849		60.8	37.2	63	0	1.37	14.9	74	4	66.0	0.44	13.7	5	3	59.0	7
BW148		61.9	35.5	61	0	1.40	16.3	85	4	69.9	0.40	15.5	5	4	61.1	4
BW150		61.0	32.9	46	2	1.31	15.7	78	4	68.5	0.39	14.6	5	4	59.0	4
BW152		61.0	33.0	44	2	1.28	15.7	79	4	69.2	0.40	14.9	5	4	63.1	5
PH986-61		62.4	46.3	80	0	1.42	16.3	59	4	64.9	0.41	15.6	5	2	66.8	6
TR983-239		62.9	49.8	82	1	1.36	15.5	70	4	67.3	0.43	14.5	5	3	63.4	5

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=CARRINGTON NURSERY=UNIFORM

TABLE 4 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		58.2	2.75	9	8.5	8.5	194	1	2.7	MI				MI				MI	MJ	MI				
CHRIS		60.5	2.50	9	9.0	8.0	196	2	3.3	MI									MI	MI				
ERA	S	57.3	3.50	9	8.5	8.0	195	2	2.7	MI		MI				MI		MI	MJ					
STOA	S	59.6	3.75	7	9.0	8.0	183	2	3.3	MI									MJ					
BUTTE 86	S	64.1	3.25	9	9.0	7.5	190	4	4.0															MI
SD3056		64.1	3.25	9	8.5	8.0	204	4	4.0															
SD8072		62.3	3.00	9	8.0	8.0	188	4	4.0															
SD8073		62.8	4.00	9	8.0	8.5	191	4	4.0															
SD8074		63.4	4.50	9	8.5	8.0	183	4	4.0															
SD8070		62.7	4.00	9	8.5	8.0	200	4	4.0															
MN88334		61.3	2.25	7	8.5	8.0	185	2	3.3	MI									MI	MI				
MN88076		62.0	3.00	9	8.5	8.0	191	4	4.0															
MN88415		60.3	3.00	7	8.5	8.5	185	2	3.3										MJ					
MN89028		61.8	2.75	9	8.5	8.0	197	2	3.3										MI	MI				
MN89408		60.2	3.75	7	8.5	8.0	183	2	3.0							MI			MJ					
ND671		67.7	4.00	9	9.5	7.0	198	4	4.0															MI
ND673		61.1	4.25	9	9.0	8.0	193	3	3.7										MI					
ND675		63.7	4.25	9	9.5	7.5	199	4	4.0															MI
ND681		60.0	3.75	9	8.5	8.0	193	2	3.3										MJ					
ND682		62.1	3.00	7	9.0	8.0	189	4	3.3								MJ							
XW398A4		60.0	4.50	9	9.5	8.5	215	2	3.0					MI					MJ					
XW397A3		59.3	3.25	9	8.5	8.5	203	2	3.3										MJ					
N87-0306		61.1	4.00	9	9.5	8.0	202	3	3.7										MI					
N88-0022		58.2	3.25	9	9.0	8.0	201	2	3.3										MJ					
N88-3136		62.1	3.25	9	8.5	8.0	212	4	4.0															
N88-3034		62.5	2.50	9	8.5	7.5	209	3	3.7	MI										MI				MI
N86-0348		62.0	3.25	9	8.5	8.0	190	4	3.3					MJ										
MT8849		59.0	6.50	9	9.5	8.0	194	1	2.7					MI				MI	MJ	MI				
BW148		61.1	3.25	7	8.5	8.0	186	3	3.7										MI					
BW150		59.0	2.75	9	8.5	8.0	208	1	3.0										MJ	MI				
BW152		63.1	3.25	9	8.5	7.5	202	4	4.0															MI
PH986-61		66.8	4.50	9	9.5	7.0	211	4	3.3					MJ										MI
TR983-239		63.4	3.50	9	9.0	7.5	191	4	3.7					MI										MI

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	32.7	8	13.9	67.4	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	7.5	7.5	168
MAJOR FAULTING VALUES	56.9	29.7	18	12.9	65.4	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	5.0	5.0	158

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=MINNESOTA STATION=CROOKSTON NURSERY=UNIFORM

TABLE 5

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		58.7	27.4	37	2	1.51	13.0	62	3	64.7	0.47	12.1	5	1	54.6	2
CHRIS		59.4	26.8	27	2	1.43	14.2	70	4	67.6	0.41	13.1	5	4	58.6	2
ERA	S	59.0	27.4	32	2	1.37	12.5	73	2	68.6	0.47	10.9	5	2	55.8	2
STOA	S	58.9	30.6	44	0	1.51	14.6	74	4	69.1	0.39	13.6	5	4	62.1	3
BUTTE 86	S	58.9	37.2	72	1	1.55	15.9	78	4	66.0	0.45	14.7	5	4	60.3	2
SD3056		59.4	35.6	70	1	1.54	15.5	79	4	66.7	0.49	14.3	5	4	60.5	2
SD8072		59.9	34.4	72	1	1.53	15.0	82	4	69.2	0.44	14.0	5	4	59.3	2
SD8073		59.0	32.6	60	1	1.48	14.2	72	4	65.4	0.47	13.0	5	3	59.3	2
SD8074		58.7	31.5	59	0	1.56	15.6	75	4	67.0	0.47	14.8	5	4	60.3	3
SD8070		59.8	34.6	62	0	1.53	15.2	80	4	66.2	0.43	14.1	5	4	60.0	2
MN88334		58.5	27.0	28	4	1.40	13.4	65	3	67.8	0.41	12.2	5	2	54.3	1
MN88076		59.0	31.3	60	1	1.48	14.3	77	4	68.9	0.46	13.0	5	4	59.3	2
MN88415		57.9	31.3	36	1	1.57	14.9	73	4	65.5	0.51	14.2	5	3	60.0	2
MN89028		59.0	33.2	39	0	1.39	14.7	75	4	67.3	0.44	13.7	5	4	62.1	2
MN89408		58.5	28.6	31	4	1.40	13.2	91	3	65.6	0.53	11.5	5	1	59.6	3
ND671		59.5	32.6	58	0	1.70	17.2	85	4	66.3	0.40	16.8	5	4	65.7	3
ND673		60.3	35.7	69	1	1.49	14.8	71	4	69.1	0.37	14.2	5	4	60.3	3
ND675		59.7	36.9	74	1	1.57	16.5	78	4	66.8	0.48	15.8	5	4	64.0	4
ND681		58.7	38.8	77	0	1.57	16.1	75	4	66.8	0.43	15.5	5	4	60.5	2
ND682		60.5	36.4	69	0	1.52	14.9	81	4	66.7	0.47	13.8	5	4	60.0	2
XW398A4		60.6	36.1	63	0	1.49	13.9	66	3	67.5	0.46	13.1	5	4	59.0	3
XW397A3		60.0	32.4	64	0	1.49	14.4	94	4	68.1	0.47	12.7	5	3	56.9	2
N87-0306		59.1	33.4	56	0	1.49	14.3	77	4	68.6	0.45	12.9	5	3	60.0	2
N88-0022		59.6	33.6	70	1	1.42	14.0	68	4	65.7	0.45	12.6	5	2	56.9	2
N88-3136		59.0	33.7	71	0	1.59	14.6	73	4	67.9	0.41	13.7	5	4	57.6	3
N88-3034		57.6	30.4	56	0	1.69	15.9	76	4	67.6	0.45	15.2	5	4	59.6	2
N86-0348		59.4	30.4	52	1	1.46	13.9	67	3	62.5	0.47	12.8	5	1	58.2	2
MT8849		58.6	34.0	61	0	1.48	13.0	78	3	65.5	0.42	11.7	5	1	55.3	3
BW148		59.4	34.8	66	0	1.70	16.4	87	4	66.3	0.47	15.4	5	4	61.4	2
BW150		59.3	34.1	61	0	1.46	14.8	83	4	66.9	0.43	13.7	5	4	58.2	2
BW152		59.4	32.5	57	0	1.48	14.9	76	4	66.3	0.42	13.9	5	4	55.8	2
PH986-61		48.9	21.2	4	22	1.94	15.4	41	1	53.6	0.56	14.7	4	2	59.0	4
TR983-239		58.5	34.5	36	4	1.65	14.3	64	4	61.3	0.51	13.1	5	2	59.3	3

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=MINNESOTA STATION=CROOKSTON NURSERY=UNIFORM

TABLE 5 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES														
										TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		54.6	4.50	7	80	80	191	2	2.0		MI		MI	MI		MJ		MI	MJ					MI
CHRIS		58.6	3.25	7	85	85	184	2	3.3		MI							MI	MJ					
ERA	S	55.8	5.00	7	80	80	187	2	2.0		MI		MJ			MJ		MI	MJ					MI
STOA	S	62.1	4.00	9	85	80	209	4	4.0															MI
BUTTE 86	S	60.3	2.50	7	80	80	193	1	3.0									MI	MJ	MI				MI
SD3056		60.5	3.00	7	85	85	206	3	3.7									MI	MI					
SD8072		59.3	3.00	7	80	80	196	2	3.3									MI	MJ					MI
SD8073		59.3	3.50	7	80	80	189	2	3.0					MI				MI	MJ					MI
SD8074		60.3	4.00	7	80	80	192	2	3.3										MJ					MI
SD8070		60.0	3.00	7	80	75	205	2	3.3									MI	MJ					MI
MN88334		54.3	3.00	5	80	80	176	1	2.0		MI		MI			MJ		MJ	MJ		MI			MI
MN88076		59.3	3.25	7	85	80	201	2	3.3									MI	MJ					MI
MN88415		60.0	3.00	7	90	75	192	2	3.0	MI				MI				MI	MJ					MI
MN89028		62.1	3.25	9	80	75	226	4	4.0									MI						MI
MN89408		59.6	4.00	7	80	85	210	2	2.0		MI		MI	MI		MJ			MJ					
ND671		65.7	3.00	9	90	85	228	4	4.0															
ND673		60.3	4.00	9	85	80	214	2	3.3										MJ					MI
ND675		64.0	3.50	9	85	80	221	4	4.0															MI
ND681		60.5	2.75	7	85	80	205	2	3.3									MI	MI	MI				MI
ND682		60.0	3.00	7	90	80	193	2	3.3									MI	MJ					MI
XW398A4		59.0	5.00	9	80	80	205	2	3.0				MI						MJ					MI
XW397A3		56.9	3.75	7	85	75	200	2	3.0							MI		MI	MJ					MI
N87-0306		60.0	4.00	9	85	75	227	2	3.0							MI		MI	MJ					MI
N88-0022		56.9	3.75	9	85	80	210	2	2.7					MI		MI		MI	MJ					MI
N88-3136		57.6	4.00	9	85	75	213	2	3.3										MJ					MI
N88-3034		59.6	3.00	9	80	80	217	2	3.3	MI								MI	MJ					MI
N86-0348		58.2	3.50	7	80	85	202	2	2.0				MI	MJ		MI		MI	MJ					
MT8849		55.3	7.00	7	85	80	188	1	1.7				MI	MI		MJ			MJ	MI				MI
BW148		61.4	2.50	7	90	80	190	2	3.3									MI	MI	MI				MI
BW150		58.2	2.50	7	85	80	197	1	3.0									MI	MJ	MI				MI
BW152		55.8	2.75	5	80	80	191	1	3.0									MI	MJ	MI	MI			MI
PH986-61		59.0	6.00	9	85	70	234	1	1.3	MJ	MJ	MJ		MJ					MJ	MI				MI
TR983-239		59.3	3.50	9	85	75	200	2	2.7					MJ					MJ					MI

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	29.6	8	13.9	65.8	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	175
MAJOR FAULTING VALUES	56.9	26.6	18	12.9	63.8	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	165

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 6

VARIETY=BUTTE 86

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.34	1.90	58.90	63.80	3.61	3.10
K_WT	38.30	3.75	33.70	43.70	14.10	9.80
LG	71.00	7.18	60.00	79.00	51.50	10.11
SM	0.20	0.45	0.00	1.00	0.20	223.61
WHT ASH	1.43	0.14	1.28	1.59	0.02	9.47
WHT_PRO	15.06	0.99	13.90	16.20	0.98	6.58
HARD	88.00	8.37	78.00	100.00	70.00	9.51
EXTR	69.62	2.26	66.00	72.20	5.10	3.24
FL_ASH	0.39	0.04	0.36	0.45	0.00	9.09
FL_PRO	14.12	0.91	13.00	15.20	0.83	6.44
MIXO	2.80	0.84	2.00	4.00	0.70	29.88
BAKE_ABS	61.22	1.87	59.60	64.10	3.51	3.06
LOAF_VOL	189.00	12.29	170.00	204.00	151.00	6.50

VARIETY=BW148

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.90	1.18	59.40	62.20	1.40	1.94
K_WT	34.60	3.86	28.70	39.50	14.92	11.16
LG	63.40	13.16	43.00	79.00	173.30	20.76
SM	0.40	0.89	0.00	2.00	0.80	223.61
WHT_ASH	1.57	0.15	1.40	1.76	0.02	9.64
WHT_PRO	15.80	0.78	14.90	16.40	0.60	4.92
HARD	91.60	7.67	85.00	103.00	58.80	8.37
EXTR	69.24	2.58	66.30	72.70	6.64	3.72
FL_ASH	0.41	0.04	0.38	0.47	0.00	8.81
FL_PRO	15.12	0.76	14.10	16.00	0.58	5.02
MIXO	3.20	0.84	2.00	4.00	0.70	26.15
BAKE_ABS	61.24	1.96	59.30	64.40	3.83	3.20
LOAF_VOL	190.60	14.43	173.00	213.00	208.30	7.57

VARIETY=BW150

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.50	0.70	59.30	61.00	0.49	1.15
K_WT	33.82	2.37	31.00	37.50	5.62	7.01
LG	55.60	10.06	46.00	70.00	101.30	18.10
SM	0.40	0.89	0.00	2.00	0.80	223.61
WHT_ASH	1.42	0.12	1.31	1.61	0.01	8.54
WHT_PRO	14.98	0.79	14.20	15.90	0.62	5.24
HARD	90.20	9.68	78.00	100.00	93.70	10.73
EXTR	68.10	2.38	65.40	71.80	5.65	3.49
FL_ASH	0.41	0.03	0.37	0.45	0.00	8.09
FL_PRO	14.18	1.04	13.20	15.80	1.08	7.34
MIXO	2.60	0.89	2.00	4.00	0.80	34.40
BAKE ABS	57.92	1.17	56.50	59.00	1.37	2.02
LOAF_VOL	199.00	9.59	190.00	210.00	92.00	4.82

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 7

VARIETY=BW152

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.72	1.00	59.40	61.80	0.99	1.64
K_WT	33.70	1.65	32.50	36.60	2.73	4.90
LG	54.20	10.06	44.00	70.00	101.20	18.56
SM	0.80	1.10	0.00	2.00	1.20	136.93
WHT_ASH	1.42	0.11	1.28	1.55	0.01	7.63
WHT_PRO	15.24	0.59	14.60	16.00	0.34	3.84
HARD	86.40	8.62	76.00	95.00	74.30	9.98
EXTR	68.48	2.37	65.80	71.40	5.62	3.46
FL_ASH	0.41	0.03	0.38	0.46	0.00	7.71
FL_PRO	14.42	0.60	13.90	15.20	0.36	4.14
MIXO	2.80	1.30	2.00	5.00	1.70	46.57
BAKE_ABS	58.24	3.52	55.00	63.10	12.41	6.05
LOAF_VOL	191.80	10.03	178.00	202.00	100.70	5.23

VARIETY=CHRIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.00	1.23	59.30	62.20	1.53	2.06
K_WT	29.62	3.91	24.90	34.80	15.28	13.20
LG	42.20	18.46	24.00	69.00	340.70	43.74
SM	2.00	2.45	0.00	6.00	6.00	122.47
WHT_ASH	1.39	0.12	1.27	1.57	0.01	8.50
WHT_PRO	14.82	0.58	14.20	15.50	0.34	3.92
HARD	75.40	7.96	65.00	85.00	63.30	10.55
EXTR	68.70	1.39	67.30	70.80	1.92	2.02
FL_ASH	0.40	0.03	0.38	0.44	0.00	6.21
FL_PRO	14.10	0.68	13.10	14.80	0.46	4.81
MIXO	3.00	0.71	2.00	4.00	0.50	23.57
BAKE_ABS	60.14	2.72	57.90	64.70	7.40	4.52
LOAF_VOL	191.60	21.00	164.00	222.00	440.80	10.96

VARIETY=ERA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.64	2.11	55.00	60.20	4.45	3.60
K_WT	29.24	5.25	22.10	36.20	27.57	17.96
LG	39.80	26.23	8.00	78.00	688.20	65.91
SM	3.00	4.00	0.00	10.00	16.00	133.33
WHT_ASH	1.46	0.23	1.29	1.86	0.05	15.44
WHT_PRO	13.24	0.63	12.50	13.90	0.40	4.76
HARD	78.60	8.38	67.00	86.00	70.30	10.67
EXTR	68.96	1.49	66.60	70.20	2.21	2.15
FL_ASH	0.47	0.03	0.45	0.52	0.00	6.20
FL_PRO	12.14	0.86	10.90	13.00	0.75	7.12
MIXO	2.20	0.45	2.00	3.00	0.20	20.33
BAKE_ABS	57.52	1.59	55.80	59.30	2.53	2.76
LOAF_VOL	194.00	10.56	180.00	204.00	111.50	5.44

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 8

VARIETY=MARQUIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.54	0.71	58.70	60.60	0.51	1.20
K_WT	30.20	3.48	26.40	35.20	12.14	11.54
LG	48.20	17.68	27.00	73.00	312.70	36.69
SM	1.40	0.89	0.00	2.00	0.80	63.89
WHT_ASH	1.47	0.21	1.27	1.81	0.04	14.06
WHT_PRO	13.96	0.73	13.00	15.00	0.53	5.23
HARD	75.80	8.56	62.00	84.00	73.20	11.29
EXTR	66.78	1.63	64.70	68.60	2.65	2.44
FL_ASH	0.46	0.03	0.43	0.51	0.00	6.75
FL_PRO	13.12	0.74	12.10	13.90	0.55	5.66
MIXO	2.40	0.89	2.00	4.00	0.80	37.27
BAKE_ABS	59.02	3.03	54.60	62.30	9.20	5.14
LOAF_VOL	196.40	10.92	184.00	213.00	119.30	5.56

VARIETY=MN88076

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.08	1.03	59.00	61.40	1.07	1.72
K_WT	35.32	4.76	31.30	42.40	22.64	13.47
LG	67.80	14.02	55.00	89.00	196.70	20.69
SM	0.40	0.55	0.00	1.00	0.30	136.93
WHT_ASH	1.46	0.10	1.36	1.62	0.01	6.87
WHT_PRO	14.58	0.98	13.50	15.70	0.95	6.69
HARD	83.60	8.35	77.00	97.00	69.80	9.99
EXTR	69.78	1.01	68.90	71.30	1.01	1.44
FL_ASH	0.42	0.02	0.40	0.46	0.00	5.96
FL_PRO	13.42	1.21	12.10	14.80	1.47	9.04
MIXO	2.80	0.84	2.00	4.00	0.70	29.88
BAKE_ABS	60.44	2.32	58.20	63.70	5.36	3.83
LOAF_VOL	198.20	14.72	180.00	220.00	216.70	7.43

VARIETY=MN88334

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.94	1.27	58.50	61.30	1.60	2.11
K_WT	31.12	4.33	27.00	37.90	18.79	13.93
LG	42.80	18.31	28.00	73.00	335.20	42.78
SM	1.40	1.67	0.00	4.00	2.80	119.52
WHT_ASH	1.38	0.06	1.32	1.47	0.00	4.38
WHT_PRO	13.88	0.73	13.10	14.80	0.54	5.28
HARD	73.20	11.12	58.00	84.00	123.70	15.19
EXTR	69.24	1.01	67.80	70.30	1.02	1.46
FL_ASH	0.39	0.02	0.37	0.41	0.00	4.61
FL_PRO	12.98	0.93	12.10	14.30	0.86	7.13
MIXO	2.60	1.52	1.00	5.00	2.30	58.33
BAKE_ABS	58.02	2.74	54.30	61.30	7.49	4.72
LOAF_VOL	179.80	7.46	170.00	189.00	55.70	4.15

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 9

VARIETY=MN88415

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.66	1.74	57.90	62.10	3.02	2.87
K_WT	37.16	3.94	31.30	42.00	15.52	10.60
LG	58.20	15.21	36.00	78.00	231.20	26.13
SM	0.20	0.45	0.00	1.00	0.20	223.61
WHT_ASH	1.47	0.12	1.30	1.60	0.01	8.31
WHT_PRO	14.48	0.93	13.20	15.30	0.87	6.43
HARD	82.80	6.65	73.00	91.00	44.20	8.03
EXTR	67.70	1.59	65.50	70.00	2.54	2.35
FL_ASH	0.43	0.05	0.39	0.51	0.00	11.27
FL_PRO	13.78	1.03	12.50	14.90	1.06	7.46
MIXO	2.40	0.55	2.00	3.00	0.30	22.82
BAKE_ABS	59.44	1.30	57.90	60.80	1.70	2.20
LOAF_VOL	187.40	7.30	178.00	197.00	53.30	3.90

VARIETY=MN89028

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.38	1.13	59.00	61.90	1.29	1.88
K_WT	36.36	3.72	33.20	42.60	13.83	10.23
LG	60.40	16.29	39.00	84.00	265.30	26.97
SM	0.40	0.55	0.00	1.00	0.30	136.93
WHT_ASH	1.43	0.12	1.33	1.63	0.01	8.23
WHT_PRO	14.52	1.08	13.30	15.60	1.17	7.46
HARD	79.60	4.39	75.00	86.00	19.30	5.52
EXTR	68.26	1.02	67.30	69.60	1.04	1.50
FL_ASH	0.42	0.02	0.40	0.44	0.00	3.93
FL_PRO	13.66	1.18	12.20	15.00	1.39	8.62
MIXO	2.40	0.55	2.00	3.00	0.30	22.82
BAKE_ABS	61.04	1.63	59.00	62.70	2.67	2.68
LOAF_VOL	204.60	18.73	182.00	226.00	350.80	9.15

VARIETY=MN89408

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.06	2.64	56.50	62.60	6.97	4.47
K_WT	31.08	5.32	25.90	39.10	28.26	17.10
LG	40.40	24.87	16.00	79.00	618.30	61.55
SM	3.00	2.24	0.00	6.00	5.00	74.54
WHT_ASH	1.48	0.25	1.30	1.91	0.06	17.04
WHT_PRO	13.86	0.47	13.20	14.40	0.22	3.37
HARD	92.20	6.30	86.00	101.00	39.70	6.83
EXTR	67.12	1.73	65.60	69.10	2.98	2.57
FL_ASH	0.50	0.05	0.44	0.56	0.00	9.88
FL_PRO	12.38	0.53	11.50	12.80	0.28	4.25
MIXO	3.00	0.71	2.00	4.00	0.50	23.57
BAKE ABS	59.68	1.38	57.60	61.40	1.89	2.30
LOAF_VOL	195.80	12.99	181.00	210.00	168.70	6.63

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 10

VARIETY=MT8849

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.82	1.20	58.60	61.30	1.43	2.00
K_WT	35.44	4.43	29.20	41.30	19.61	12.50
LG	59.20	16.30	32.00	76.00	265.70	27.53
SM	0.60	1.34	0.00	3.00	1.80	223.61
WHT_ASH	1.48	0.15	1.37	1.73	0.02	10.05
WHT_PRO	13.90	0.82	13.00	14.90	0.67	5.87
HARD	84.20	7.66	74.00	91.00	58.70	9.10
EXTR	66.40	2.48	63.40	70.20	6.17	3.74
FL_ASH	0.44	0.02	0.41	0.47	0.00	5.28
FL_PRO	12.86	0.94	11.70	13.80	0.88	7.31
MIXO	4.20	1.92	2.00	7.00	3.70	45.80
BAKE_ABS	58.20	3.02	55.00	62.10	9.11	5.19
LOAF_VOL	194.40	9.56	188.00	211.00	91.30	4.92

VARIETY=ND671

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.08	1.74	59.50	63.80	3.02	2.80
K_WT	35.52	2.51	32.60	38.80	6.29	7.06
LG	64.00	6.60	58.00	74.00	43.50	10.31
SM	0.40	0.55	0.00	1.00	0.30	136.93
WHT_ASH	1.54	0.13	1.41	1.70	0.02	8.48
WHT_PRO	15.90	1.23	14.20	17.20	1.52	7.75
HARD	85.40	7.54	78.00	94.00	56.80	8.83
EXTR	68.36	1.31	66.30	69.80	1.72	1.92
FL_ASH	0.38	0.02	0.36	0.40	0.00	4.16
FL_PRO	15.52	1.41	13.50	16.80	1.98	9.07
MIXO	4.00	1.00	3.00	5.00	1.00	25.00
BAKE_ABS	63.98	3.59	59.30	67.70	12.87	5.61
LOAF_VOL	208.40	16.70	190.00	228.00	278.80	8.01

VARIETY=ND673

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.84	1.17	60.30	63.00	1.37	1.89
K_WT	38.56	2.80	35.70	43.10	7.85	7.27
LG	72.20	4.97	69.00	81.00	24.70	6.88
SM	0.60	0.55	0.00	1.00	0.30	91.29
WHT_ASH	1.43	0.12	1.30	1.59	0.01	8.19
WHT_PRO	14.70	0.73	13.90	15.50	0.54	4.98
HARD	83.00	11.42	71.00	100.00	130.50	13.76
EXTR	69.38	0.82	68.80	70.80	0.67	1.18
FL_ASH	0.39	0.02	0.37	0.42	0.00	5.05
FL_PRO	14.08	0.76	13.30	14.90	0.57	5.37
MIXO	4.00	0.71	3.00	5.00	0.50	17.68
BAKE_ABS	60.96	2.33	57.60	64.00	5.42	3.82
LOAF_VOL	200.20	15.06	178.00	214.00	226.70	7.52

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 11

VARIETY=ND675

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.56	1.22	59.70	63.00	1.49	1.98
K_WT	38.24	4.46	32.60	45.00	19.93	11.68
LG	72.80	11.03	56.00	87.00	121.70	15.15
SM	0.40	0.55	0.00	1.00	0.30	136.93
WHT_ASH	1.47	0.15	1.30	1.66	0.02	10.03
WHT_PRO	15.98	0.77	15.00	16.70	0.60	4.84
HARD	86.40	6.11	78.00	94.00	37.30	7.07
EXTR	68.72	1.09	66.80	69.40	1.19	1.59
FL_ASH	0.44	0.03	0.41	0.48	0.00	6.48
FL_PRO	15.54	0.94	14.50	16.40	0.88	6.03
MIXO	5.20	0.84	4.00	6.00	0.70	16.09
BAKE_ABS	63.62	2.39	59.60	65.70	5.71	3.76
LOAF_VOL	208.40	15.68	186.00	223.00	245.80	7.52

VARIETY=ND681

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.66	1.37	58.70	62.20	1.88	2.26
K_WT	37.40	2.73	33.10	40.20	7.44	7.29
LG	67.80	10.35	53.00	77.00	107.20	15.27
SM	0.00	0.00	0.00	0.00	0.00	.
WHT_ASH	1.47	0.13	1.30	1.62	0.02	8.98
WHT_PRO	15.48	0.84	14.00	16.10	0.71	5.43
HARD	82.00	8.12	72.00	91.00	66.00	9.91
EXTR	68.88	1.24	66.80	70.10	1.55	1.81
FL_ASH	0.39	0.02	0.37	0.43	0.00	6.01
FL_PRO	15.06	0.94	13.40	15.70	0.88	6.24
MIXO	3.60	0.89	2.00	4.00	0.80	24.85
BAKE_ABS	62.16	2.50	60.00	66.10	6.24	4.02
LOAF_VOL	205.20	12.17	193.00	223.00	148.20	5.93

VARIETY=ND682

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.06	0.95	60.50	63.00	0.91	1.54
K_WT	36.86	2.88	34.10	41.70	8.29	7.81
LG	60.80	10.47	50.00	74.00	109.70	17.23
SM	0.60	0.89	0.00	2.00	0.80	149.07
WHT_ASH	1.48	0.12	1.33	1.66	0.02	8.32
WHT_PRO	14.60	0.94	13.60	15.50	0.89	6.44
HARD	82.00	4.00	77.00	87.00	16.00	4.88
EXTR	67.16	1.42	65.00	68.80	2.02	2.12
FL_ASH	0.42	0.03	0.39	0.47	0.00	7.53
FL_PRO	13.68	1.02	12.40	14.80	1.05	7.48
MIXO	3.40	0.89	2.00	4.00	0.80	26.31
BAKE_ABS	60.58	2.02	57.30	62.10	4.10	3.34
LOAF_VOL	186.80	10.78	169.00	197.00	116.20	5.77

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 12

VARIETY=N86-0348

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.74	1.18	58.60	61.60	1.39	1.97
K_WT	31.68	4.56	25.50	38.00	20.77	14.38
LG	52.00	19.89	23.00	78.00	395.50	38.24
SM	0.80	1.30	0.00	3.00	1.70	162.98
WHT_ASH	1.53	0.28	1.37	2.03	0.08	18.27
WHT_PRO	14.22	0.68	13.60	15.10	0.47	4.81
HARD	72.40	8.17	61.00	81.00	66.80	11.29
EXTR	65.48	2.50	62.50	68.80	6.26	3.82
FL_ASH	0.45	0.04	0.42	0.51	0.00	8.03
FL_PRO	13.46	0.91	12.70	14.60	0.83	6.78
MIXO	2.80	0.84	2.00	4.00	0.70	29.88
BAKE ABS	60.64	2.15	58.20	63.10	4.61	3.54
LOAF VOL	199.60	9.34	190.00	214.00	87.30	4.68

VARIETY=N87-0306

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.18	1.12	59.10	61.70	1.25	1.86
K_WT	36.48	4.46	32.20	42.60	19.89	12.22
LG	61.60	15.82	41.00	82.00	250.30	25.68
SM	0.60	0.89	0.00	2.00	0.80	149.07
WHT_ASH	1.48	0.19	1.26	1.75	0.03	12.61
WHT_PRO	14.36	0.74	13.50	15.20	0.54	5.13
HARD	83.00	6.52	76.00	90.00	42.50	7.85
EXTR	68.62	0.66	67.80	69.60	0.44	0.97
FL_ASH	0.41	0.03	0.39	0.45	0.00	6.51
FL_PRO	13.52	0.81	12.90	14.50	0.65	5.97
MIXO	3.40	0.89	2.00	4.00	0.80	26.31
BAKE_ABS	61.82	2.45	60.00	66.10	6.02	3.97
LOAF_VOL	211.60	13.32	194.00	227.00	177.30	6.29

VARIETY=N88-0022

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.68	1.53	59.40	62.50	2.35	2.52
K_WT	37.04	6.68	28.80	45.80	44.68	18.05
LG	70.40	18.51	41.00	89.00	342.80	26.30
SM	0.40	0.55	0.00	1.00	0.30	136.93
WHT_ASH	1.44	0.21	1.28	1.80	0.04	14.55
WHT_PRO	14.24	0.63	13.60	15.20	0.39	4.40
HARD	74.20	9.18	64.00	88.00	84.20	12.37
EXTR	67.02	1.19	65.70	68.80	1.43	1.78
FL_ASH	0.42	0.03	0.39	0.47	0.00	8.10
FL_PRO	13.26	0.63	12.60	14.10	0.39	4.73
MIXO	2.40	0.55	2.00	3.00	0.30	22.82
BAKE_ABS	59.44	2.10	56.90	62.50	4.42	3.54
LOAF_VOL	206.00	5.05	200.00	210.00	25.50	2.45

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 13

VARIETY=N88-3034

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.72	1.11	57.60	60.50	1.24	1.89
K_WT	31.44	3.35	27.20	36.50	11.23	10.66
LG	46.20	17.73	20.00	67.00	314.20	38.37
SM	0.80	1.10	0.00	2.00	1.20	136.93
WHT_ASH	1.66	0.15	1.52	1.91	0.02	9.22
WHT_PRO	15.70	0.57	15.00	16.30	0.32	3.63
HARD	78.40	6.95	69.00	88.00	48.30	8.86
EXTR	68.62	1.15	67.40	70.20	1.31	1.67
FL_ASH	0.43	0.03	0.38	0.46	0.00	7.21
FL_PRO	15.30	0.70	14.50	16.20	0.49	4.58
MIXO	2.40	0.55	2.00	3.00	0.30	22.82
BAKE_ABS	60.84	1.56	59.30	62.50	2.43	2.56
LOAF_VOL	214.00	8.57	202.00	224.00	73.50	4.01

VARIETY=N88-3136

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.06	1.73	59.00	63.40	2.99	2.83
K_WT	33.88	2.86	30.80	38.30	8.15	8.43
LG	60.60	12.95	46.00	76.00	167.80	21.38
SM	0.60	0.89	0.00	2.00	0.80	149.07
WHT_ASH	1.51	0.16	1.36	1.74	0.03	10.60
WHT_PRO	14.42	0.86	13.30	15.40	0.74	5.97
HARD	75.20	9.07	64.00	89.00	82.20	12.06
EXTR	69.08	1.49	67.90	71.60	2.21	2.15
FL_ASH	0.41	0.02	0.38	0.44	0.00	5.67
FL_PRO	13.88	0.82	13.00	15.00	0.67	5.88
MIXO	3.20	0.84	2.00	4.00	0.70	26.15
BAKE_ABS	59.72	2.20	57.60	62.10	4.85	3.69
LOAF_VOL	209.60	10.26	194.00	222.00	105.30	4.90

VARIETY=PH986-61

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	53.84	9.14	40.60	62.40	83.59	16.98
K_WT	32.36	12.84	17.80	46.30	164.91	39.68
LG	38.80	39.02	0.00	80.00	1522.70	100.57
SM	13.80	20.30	0.00	46.00	412.20	147.12
WHT_ASH	1.72	0.40	1.38	2.32	0.16	23.28
WHT_PRO	14.80	1.18	13.50	16.30	1.40	7.99
HARD	62.00	12.92	41.00	73.00	167.00	20.84
EXTR	61.24	5.54	53.60	67.60	30.66	9.04
FL_ASH	0.50	0.09	0.41	0.63	0.01	18.12
FL_PRO	14.40	1.02	13.20	15.60	1.03	7.06
MIXO	5.00	1.41	4.00	7.00	2.00	28.28
BAKE_ABS	60.76	3.57	57.60	66.80	12.73	5.87
LOAF_VOL	218.00	11.90	206.00	234.00	141.50	5.46

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 14

VARIETY=SD3056

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.64	1.36	59.40	62.20	1.85	2.24
K_WT	38.36	4.29	33.80	44.40	18.43	11.19
LG	74.20	11.54	58.00	89.00	133.20	15.55
SM	0.40	0.55	0.00	1.00	0.30	136.93
WHT_ASH	1.53	0.12	1.45	1.73	0.01	7.87
WHT_PRO	15.36	1.09	14.10	16.60	1.19	7.11
HARD	91.80	7.60	79.00	99.00	57.70	8.27
EXTR	68.08	0.78	66.70	68.60	0.61	1.14
FL_ASH	0.47	0.02	0.45	0.49	0.00	4.38
FL_PRO	14.50	1.36	13.10	15.90	1.84	9.35
MIXO	2.40	0.55	2.00	3.00	0.30	22.82
BAKE_ABS	61.52	2.08	59.60	64.10	4.31	3.37
LOAF_VOL	203.40	10.04	191.00	218.00	100.80	4.94

VARIETY=SD8070

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.40	1.15	59.80	62.80	1.32	1.87
K_WT	36.84	2.08	34.60	40.00	4.32	5.64
LG	65.80	6.83	59.00	77.00	46.70	10.39
SM	0.40	0.55	0.00	1.00	0.30	136.93
WHT_ASH	1.45	0.10	1.34	1.57	0.01	7.19
WHT_PRO	14.78	1.08	13.40	15.90	1.16	7.28
HARD	84.80	4.97	80.00	93.00	24.70	5.86
EXTR	68.66	1.62	66.20	70.40	2.62	2.36
FL_ASH	0.40	0.02	0.37	0.43	0.00	5.59
FL_PRO	13.88	1.21	12.30	15.10	1.46	8.71
MIXO	3.00	1.00	2.00	4.00	1.00	33.33
BAKE_ABS	60.40	1.95	58.20	62.70	3.78	3.22
LOAF_VOL	202.20	15.42	179.00	222.00	237.70	7.62

VARIETY=SD8072

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.36	1.35	59.90	62.80	1.83	2.21
K_WT	37.56	3.36	34.20	42.20	11.32	8.96
LG	75.20	7.33	66.00	86.00	53.70	9.74
SM	0.60	0.55	0.00	1.00	0.30	91.29
WHT_ASH	1.48	0.11	1.38	1.65	0.01	7.66
WHT_PRO	14.82	0.94	13.80	16.10	0.88	6.34
HARD	90.00	6.44	82.00	98.00	41.50	7.16
EXTR	69.92	0.87	68.80	70.80	0.75	1.24
FL_ASH	0.42	0.02	0.41	0.44	0.00	3.58
FL_PRO	14.06	1.09	13.00	15.40	1.19	7.75
MIXO	2.40	0.55	2.00	3.00	0.30	22.82
BAKE_ABS	59.98	1.68	58.20	62.30	2.81	2.79
LOAF_VOL	189.00	12.04	170.00	202.00	145.00	6.37

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 15

VARIETY=SD8073

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.02	2.00	59.00	63.70	3.99	3.27
K_WT	36.44	4.58	32.60	43.70	21.00	12.58
LG	68.60	11.33	60.00	87.00	128.30	16.51
SM	0.40	0.55	0.00	1.00	0.30	136.93
WHT_ASH	1.46	0.13	1.33	1.68	0.02	9.02
WHT_PRO	14.28	0.83	13.40	15.40	0.69	5.83
HARD	82.20	6.76	72.00	91.00	45.70	8.22
EXTR	68.72	1.88	65.40	69.80	3.53	2.73
FL_ASH	0.44	0.03	0.40	0.47	0.00	6.99
FL_PRO	13.36	0.83	12.60	14.30	0.68	6.19
MIXO	3.00	1.00	2.00	4.00	1.00	33.33
BAKE_ABS	61.00	1.77	59.00	62.80	3.14	2.90
LOAF_VOL	188.00	13.73	166.00	204.00	188.50	7.30

VARIETY=SD8074

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.94	1.69	58.70	63.00	2.86	2.78
K_WT	33.94	2.64	31.40	37.70	6.97	7.78
LG	63.80	8.64	56.00	77.00	74.70	13.55
SM	0.20	0.45	0.00	1.00	0.20	223.61
WHT_ASH	1.47	0.15	1.32	1.69	0.02	10.21
WHT_PRO	15.14	0.88	14.10	16.10	0.78	5.84
HARD	85.60	7.02	75.00	92.00	49.30	8.20
EXTR	68.16	0.86	67.00	68.90	0.73	1.26
FL_ASH	0.43	0.03	0.39	0.47	0.00	7.35
FL_PRO	14.38	0.96	13.20	15.20	0.92	6.68
MIXO	4.20	0.84	3.00	5.00	0.70	19.92
BAKE_ABS	61.62	1.20	60.30	63.40	1.45	1.95
LOAF_VOL	189.60	7.77	180.00	198.00	60.30	4.10

VARIETY=STOA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.42	1.59	58.90	62.80	2.52	2.63
K_WT	32.96	4.61	27.50	39.80	21.21	13.97
LG	48.20	21.11	19.00	78.00	445.70	43.80
SM	0.80	1.30	0.00	3.00	1.70	162.98
WHT_ASH	1.47	0.16	1.35	1.74	0.03	10.90
WHT_PRO	14.50	0.58	13.90	15.10	0.33	3.99
HARD	82.80	9.15	74.00	95.00	83.70	11.05
EXTR	69.24	0.77	68.50	70.50	0.59	1.11
FL_ASH	0.39	0.01	0.38	0.41	0.00	2.79
FL_PRO	13.84	0.65	13.30	14.80	0.42	4.70
MIXO	3.40	0.55	3.00	4.00	0.30	16.11
BAKE_ABS	60.86	1.45	59.60	62.70	2.10	2.38
LOAF_VOL	198.00	14.59	182.00	213.00	213.00	7.37

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 16

VARIETY=TR983-239

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.66	3.37	55.10	63.10	11.35	5.65
K_WT	39.68	10.97	25.70	51.80	120.27	27.64
LG	53.00	33.69	8.00	90.00	1135.00	63.57
SM	2.20	2.68	0.00	6.00	7.20	121.97
WHT_ASH	1.61	0.27	1.36	2.05	0.07	16.79
WHT_PRO	14.54	0.78	13.40	15.50	0.60	5.34
HARD	72.40	7.57	64.00	84.00	57.30	10.46
EXTR	65.02	2.93	61.30	68.60	8.60	4.51
FL_ASH	0.48	0.06	0.43	0.58	0.00	13.24
FL_PRO	13.68	0.81	12.60	14.50	0.65	5.90
MIXO	3.60	0.89	3.00	5.00	0.80	24.85
BAKE_ABS	61.28	1.71	59.30	63.40	2.91	2.78
LOAF_VOL	197.20	11.73	181.00	212.00	137.70	5.95

VARIETY=XW397A3

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.28	1.80	57.60	62.10	3.26	2.99
K_WT	34.46	6.69	25.90	43.70	44.74	19.41
LG	57.40	24.91	19.00	84.00	620.30	43.39
SM	1.00	1.73	0.00	4.00	3.00	173.21
WHT_ASH	1.49	0.21	1.36	1.85	0.04	13.84
WHT_PRO	14.98	1.06	13.90	16.40	1.13	7.10
HARD	101.40	7.09	94.00	113.00	50.30	6.99
EXTR	69.12	1.16	67.90	70.70	1.34	1.68
FL_ASH	0.46	0.05	0.41	0.53	0.00	10.24
FL_PRO	13.60	1.18	12.40	14.90	1.38	8.65
MIXO	2.80	0.45	2.00	3.00	0.20	15.97
BAKE_ABS	59.32	1.54	56.90	61.10	2.37	2.60
LOAF_VOL	201.80	14.65	180.00	221.00	214.70	7.26

VARIETY=XW398A4

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.26	1.21	60.30	63.10	1.47	1.98
K_WT	37.44	5.43	29.70	44.80	29.52	14.51
LG	59.60	20.96	26.00	84.00	439.30	35.17
SM	0.60	0.89	0.00	2.00	0.80	149.07
WHT_ASH	1.50	0.20	1.34	1.85	0.04	13.52
WHT_PRO	14.16	0.86	13.30	15.30	0.74	6.07
HARD	73.60	7.27	66.00	82.00	52.80	9.87
EXTR	67.12	0.84	65.90	67.80	0.71	1.25
FL_ASH	0.46	0.04	0.42	0.53	0.00	9.35
FL_PRO	13.48	1.01	12.40	14.60	1.02	7.48
MIXO	3.40	0.55	3.00	4.00	0.30	16.11
BAKE_ABS	60.04	2.24	57.30	63.40	5.02	3.73
LOAF_VOL	207.80	10.43	192.00	219.00	108.70	5.02

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=SOUTH DAKOTA STATION=BROOKINGS NURSERY=UNIFORM

TABLE 17

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		56.7	22.8	8	5	1.80	12.9	74	1	63.9	0.53	12.5	5	3	57.6	3
CHRIS		60.1	28.8	49	2	1.68	13.7	85	3	65.4	0.44	13.5	5	4	60.0	4
ERA	S	57.1	24.9	16	9	1.80	12.6	77	2	65.2	0.53	12.0	5	2	55.5	3
STOA	S	58.6	30.4	39	2	1.83	13.6	79	3	66.0	0.44	12.9	5	3	58.2	3
BUTTE 86	S	60.5	34.6	68	1	1.70	12.8	88	2	65.7	0.48	11.7	5	2	57.9	2
SD3056		59.3	34.6	61	1	1.75	17.5	88	4	66.2	0.53	12.6	5	3	58.2	3
SD8072		60.4	36.8	72	2	1.74	12.6	84	2	68.4	0.48	11.7	5	2	57.6	3
SD8073		59.0	34.2	68	1	1.78	12.4	81	2	64.9	0.52	11.6	5	2	57.3	3
SD8074		58.4	31.0	54	6	1.78	12.9	77	2	64.9	0.52	12.0	5	2	57.9	4
SD8070		60.1	33.8	64	2	1.75	12.0	83	2	66.2	0.44	10.9	5	2	55.5	3
MN88334		57.4	24.4	18	7	1.66	12.9	70	1	63.1	0.43	12.8	5	2	56.2	2
MN88076		59.5	33.3	63	0	1.73	13.0	82	3	64.7	0.48	12.2	5	2	57.6	3
MN88415		60.3	35.1	59	3	1.81	12.7	81	2	63.8	0.53	12.2	5	2	54.3	5
MN89028		60.6	32.6	56	1	1.65	12.3	79	2	62.5	0.45	11.5	5	1	56.2	2
MN89408		57.9	28.8	44	4	1.79	12.0	95	2	64.4	0.59	10.9	5	2	56.2	3
ND671		61.6	33.2	62	1	1.81	13.0	84	3	66.0	0.41	12.4	5	2	61.1	3
ND673		60.6	33.3	64	2	1.69	12.9	88	2	66.0	0.44	11.9	5	2	58.2	3
ND675		62.4	33.6	68	0	1.76	13.5	83	3	66.2	0.47	12.7	5	3	57.9	4
ND681		60.3	34.2	59	1	1.72	13.4	81	3	64.5	0.38	12.6	5	3	56.5	3
ND682		61.1	32.4	46	0	1.75	13.0	81	3	64.4	0.42	12.0	5	2	57.6	4
XW398A4		58.7	31.2	50	2	1.86	13.0	79	3	63.7	0.60	12.6	5	3	57.3	4
XW397A3		58.2	28.2	43	3	1.85	13.1	90	3	66.0	0.55	12.1	5	2	57.9	3
N87-0306		59.4	32.4	58	2	1.69	12.4	78	2	67.0	0.47	11.5	5	2	55.3	2
N88-0022		57.1	28.6	51	2	1.81	12.8	65	2	60.9	0.56	12.1	5	1	54.3	2
N88-3136		59.0	28.2	47	1	1.79	13.6	72	3	63.3	0.40	13.1	5	3	56.2	3
N88-3034		56.4	28.4	29	4	1.91	14.5	75	3	64.1	0.46	14.2	5	4	56.5	3
N86-0348		59.0	31.1	57	1	1.84	12.6	71	2	63.1	0.53	11.9	5	1	54.6	2
MT8849		58.6	31.6	43	2	1.86	13.1	82	3	62.8	0.50	12.1	5	1	53.8	3
BW148		60.0	31.4	59	2	1.79	13.8	79	3	66.0	0.42	NA	5	4	56.5	3
BW150		58.2	29.4	53	2	1.72	13.5	84	3	64.9	0.48	12.8	5	3	55.3	2
BW152		59.7	33.1	61	1	1.71	13.7	88	3	66.7	0.50	13.1	5	4	55.0	2
PH986-61		55.5	28.4	19	7	1.92	13.0	62	2	58.9	0.55	12.7	5	1	55.0	3
TR983-239		58.0	34.1	44	3	1.83	13.2	75	3	59.4	0.55	12.5	5	1	61.4	4

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=SOUTH DAKOTA STATION=BROOKINGS NURSERY=UNIFORM

TABLE 17 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES														
										TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		57.6	4.50	5	8.0	8.5	172	2	2.0	MJ	MJ		MJ			MI			MJ		MI			
CHRIS		60.0	3.25	5	8.0	8.5	176	2	3.0				MI						MJ		MI			
ERA	S	55.5	5.00	5	8.0	8.5	180	2	2.0	MI	MI	MI	MJ			MJ			MJ		MI			
STOA	S	60.2	4.25	7	8.5	8.5	184	2	2.7				MI			MI			MJ					
BUTTE 86	S	59.9	3.50	5	8.0	8.5	175	2	2.0				MJ			MJ		MI	MJ		MI			
SD3056		60.2	4.25	7	8.0	8.0	190	2	3.0							MI			MJ					
SD8072		59.6	4.50	5	8.0	8.5	169	2	2.0				MJ			MJ			MJ		MI			
SD8073		59.3	5.50	5	8.0	7.5	162	2	2.0				MJ			MJ			MJ		MI		MI	
SD8074		57.9	5.50	5	8.0	7.5	168	2	2.0				MJ			MJ			MJ		MI		MI	
SD8070		57.5	4.75	5	8.5	7.5	174	2	2.0				MJ			MJ			MJ		MI		MI	
MN88334		58.2	2.75	5	8.0	8.5	173	1	1.3	MI	MJ		MJ	MI		MI		MI	MJ	MI	MI			
MN88076		57.6	4.25	7	8.5	8.5	186	2	2.3				MI			MJ			MJ					
MN88415		56.3	4.75	5	8.5	7.5	167	2	2.0				MJ			MJ			MJ		MI		MI	
MN89028		56.2	4.75	7	8.5	8.0	182	2	1.7				MJ	MI		MJ		MI	MJ					
MN89408		56.2	4.75	2	8.0	7.5	172	1	1.7	MI			MJ		MI	MJ			MJ		MJ		MI	
ND671		61.1	3.75	7	9.0	8.0	189	3	2.7				MI			MJ			MI					
ND673		60.2	5.25	7	8.0	8.0	184	2	2.0				MJ			MJ			MJ					
ND675		59.9	6.00	7	8.5	8.0	183	1	2.3				MI			MI			MJ	MI				
ND681		58.5	5.00	7	9.5	8.5	179	2	2.7				MI			MI			MJ					
ND682		59.6	5.50	5	8.5	8.0	174	2	2.3				MI			MJ			MJ		MI			
XW398A4		57.3	5.25	7	9.5	8.5	181	2	2.7				MI		MI	MI			MJ					
XW397A3		59.9	4.50	7	8.0	8.0	182	2	2.3				MI			MJ			MJ					
N87-0306		57.3	5.25	5	8.5	8.5	172	2	2.0				MJ			MJ		MI	MJ		MI			
N88-0022		56.3	5.50	5	8.5	8.5	185	2	1.7	MI			MJ	MJ		MJ		MI	MJ		MI			
N88-3136		56.2	5.00	7	8.5	8.5	183	2	2.7				MI	MI					MJ					
N88-3034		56.5	4.50	9	8.5	7.5	185	2	3.0	MJ									MJ					MI
N86-0348		56.6	4.75	5	8.5	8.0	170	2	1.7				MJ	MI		MJ		MI	MJ		MI			
MT8849		55.8	9.75	5	9.0	8.5	171	1	1.7				MI	MI		MJ			MJ	MJ	MI			
BW148		58.5	3.75	7	8.5	7.5	181	2	3.0				MI						MJ					MI
BW150		55.3	4.00	7	8.5	8.0	183	2	2.7				MI			MI		MI	MJ					
BW152		55.0	3.75	5	8.5	7.5	176	2	3.0				MI					MI	MJ		MI		MI	
PH986-61		57.0	7.50	7	8.5	9.0	188	1	1.3	MJ			MI	MJ		MI			MJ	MI				
TR983-239		61.4	3.75	7	9.0	8.0	185	3	2.3				MI	MJ		MI			MI					

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	27.9	8	13.9	63.5	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	7.5	7.5	159
MAJOR FAULTING VALUES	56.9	24.9	18	12.9	61.5	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	5.0	5.0	149

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=SOUTH DAKOTA STATION=REDFIELD NURSERY=UNIFORM

TABLE 18

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		53.0	17.9	3	20	1.79	14.6	71	1	63.8	0.50	13.9	5	4	59.3	2
CHRIS		57.0	23.1	14	7	1.62	14.7	74	4	66.1	0.41	14.4	5	4	59.3	2
ERA	S	54.2	20.5	4	13	1.84	14.1	72	3	66.2	0.50	13.5	5	4	59.0	3
STOA	S	53.9	22.1	7	8	1.82	15.4	77	3	63.8	0.48	15.0	5	4	61.4	4
BUTTE 86	S	57.3	29.4	28	2	1.75	16.2	84	4	64.5	0.48	15.5	5	4	61.4	3
SD3056		56.8	27.0	29	3	1.76	15.2	86	3	65.1	0.50	14.6	5	4	60.8	2
SD8072		58.0	27.3	31	2	1.71	15.4	79	4	66.3	0.48	14.9	5	4	59.6	3
SD8074		56.9	27.2	28	2	1.64	15.3	78	3	64.6	0.50	14.6	5	4	60.3	4
SD8074		56.3	26.5	25	2	1.70	15.4	76	3	63.3	0.48	15.1	5	4	60.5	4
SD8070		58.2	28.0	33	2	1.69	15.5	75	4	65.7	0.44	14.5	5	4	59.3	3
MN88334		56.1	20.9	13	5	1.50	14.2	65	3	65.2	0.38	13.9	5	4	57.6	2
MN88076		57.0	26.7	37	2	1.64	14.9	77	4	66.2	0.44	13.9	5	4	60.3	3
MN88415		59.3	29.8	31	2	1.65	14.4	74	4	64.3	0.45	13.9	5	4	58.2	2
MN89028		56.9	27.0	26	4	1.69	14.5	67	3	63.5	0.44	14.3	5	4	60.3	3
MN89408		54.2	23.0	8	12	1.71	14.9	87	3	60.0	0.61	13.8	5	1	58.6	3
ND671		57.5	26.0	18	3	1.81	15.6	73	4	61.5	0.46	15.4	5	3	63.1	4
ND673		58.5	27.9	38	2	1.70	15.5	77	4	64.9	0.45	14.9	5	4	59.3	3
ND675		59.8	29.9	48	1	1.66	16.3	81	4	65.7	0.48	15.9	5	4	62.5	5
ND681		57.6	28.7	31	1	1.68	15.4	68	4	66.2	0.42	15.1	5	4	60.5	4
ND682		58.7	26.6	14	4	1.69	15.1	85	4	65.1	0.46	14.2	5	4	59.0	3
XW398A4		55.7	27.9	24	3	1.73	14.3	59	3	61.8	0.54	14.0	5	3	62.7	3
XW397A3		56.4	25.6	20	5	1.77	15.5	93	3	65.9	0.53	14.6	5	4	62.7	4
N87-0306		55.2	25.6	21	0	1.75	14.9	69	3	62.5	0.48	14.2	5	3	61.8	4
N88-022		54.7	25.8	34	3	1.77	15.0	58	3	59.6	0.53	14.2	5	2	59.0	2
N88-3136		55.3	24.4	21	5	1.83	15.7	54	3	60.9	0.50	14.8	5	3	59.6	3
N88-3034		53.0	22.6	9	7	1.89	16.0	62	3	62.8	0.47	16.0	5	4	60.0	3
N86-0348		54.6	23.5	20	4	1.73	15.2	73	3	61.1	0.55	14.7	5	3	59.3	2
MT8849		54.6	27.2	23	3	1.72	14.4	84	3	64.4	0.49	13.6	5	4	57.6	3
BW148		56.9	25.3	19	4	1.86	15.8	78	3	66.3	0.48	15.2	5	4	60.8	3
BW150		56.5	27.2	28	4	1.63	15.4	76	3	64.6	0.42	14.7	5	4	56.5	1
BW152		56.4	26.1	34	3	1.59	15.7	77	3	63.3	0.40	15.1	5	4	58.2	2
PH986-61		48.2	20.0	6	24	2.05	15.6	57	2	53.4	0.60	15.1	5	2	60.3	4
TR983-239		54.9	28.2	17	7	1.88	15.3	61	3	57.1	0.56	15.1	5	2	60.3	4

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=SOUTH DAKOTA STATION=REDFIELD NURSERY=UNIFORM

TABLE 18 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		59.3	4.00	9	8.0	8.0	227	2	2.3	MJ	MJ	MJ						MI	MJ					
CHRIS		59.3	3.75	9	9.0	8.0	211	2	3.3	MI								MI	MJ					
ERA	S	59.0	4.25	9	8.0	8.5	213	2	3.0	MJ	MI	MI							MJ					
STOA	S	61.4	4.50	9	8.5	8.5	213	3	3.3	MJ		MI							MI					
BUTTE 86	S	61.4	3.50	9	8.0	8.5	214	3	3.7	MI									MI					
SD3056		60.8	4.00	9	8.0	8.5	212	3	3.3	MJ								MI	MI					
SD8072		59.6	4.00	9	8.0	8.0	203	2	3.3										MJ					
SD8074		60.3	4.00	9	8.0	8.0	198	2	3.0	MJ									MJ					
SD8074		60.5	5.00	9	8.0	8.0	211	3	3.3	MJ									MI					
SD8070		59.3	4.25	9	8.0	8.0	213	2	3.3										MJ					
MN88334		57.6	2.50	7	8.5	8.5	193	1	2.7	MJ	MI							MI	MJ	MI				
MN88076		60.3	4.00	9	8.0	8.0	215	2	3.3	MI									MJ					
MN88415		58.2	4.25	9	9.0	8.0	200	2	3.3									MI	MJ					
MN89028		60.3	4.25	9	8.5	7.0	222	2	3.0	MJ									MJ				MI	
MN89408		58.6	4.50	9	8.0	8.0	222	2	2.0	MJ		MI		MJ	MJ				MJ					
ND671		63.1	3.50	9	8.5	8.0	233	4	3.7	MI				MI										
ND673		59.3	6.00	9	8.5	8.0	221	1	3.0										MJ	MI				
ND675		62.5	5.00	9	8.5	8.0	221	4	4.0															
ND681		60.5	4.00	9	8.0	8.0	209	3	3.7	MI									MI					
ND682		59.0	4.75	9	8.0	8.5	205	2	3.3										MJ					
XW398A4		60.0	4.00	9	8.5	7.5	226	2	2.7	MJ				MI					MJ				MI	
XW397A3		62.7	4.00	9	8.0	8.5	215	4	3.7	MJ														
N87-0306		60.1	4.50	9	8.5	8.0	217	2	2.7	MJ				MI					MJ					
N88-022		59.0	4.00	9	8.0	8.5	232	2	2.3	MJ				MJ				MI	MJ					
N88-3136		58.0	4.00	9	8.5	9.0	203	2	2.7	MJ				MI					MJ					
N88-3034		60.0	3.75	9	8.0	8.0	227	2	3.0	MJ									MJ					
N86-0348		59.3	3.50	7	8.0	8.0	218	2	2.7	MJ				MI				MI	MJ					
MT8849		57.6	6.00	5	8.0	9.0	196	1	2.7	MJ									MJ	MI	MI			
BW148		60.8	3.50	7	8.0	8.0	183	2	3.0	MJ									MI					MI
BW150		56.5	3.25	7	8.5	8.0	188	1	2.7	MJ								MJ	MJ					MI
BW152		58.2	3.00	7	8.0	9.0	191	1	2.7	MJ								MI	MJ					MI
PH986-61		60.3	6.50	9	8.5	8.5	212	1	1.7	MJ	MI	MJ		MJ	MI				MJ	MI				
TR983-239		60.3	4.50	7	9.0	8.0	198	2	2.3	MJ				MJ					MJ					

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	21.9	8	13.9	62.7	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	7.5	7.5	192
MAJOR FAULTING VALUES	56.9	18.9	18	12.9	60.7	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	5.0	5.0	182

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=SOUTH DAKOTA STATION=SELBY NURSERY=UNIFORM

TABLE 19

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		60.6	26.7	25	0	1.55	11.7	80	2	68.9	0.47	11.1	5	2	53.8	3
CHRIS		62.2	28.5	35	1	1.59	13.0	78	3	63.9	0.42	12.5	5	3	57.6	4
ERA	S	61.5	27.6	32	2	1.64	11.8	77	2	67.3	0.47	10.9	5	2	55.0	2
STOA	S	61.2	30.0	39	1	1.66	12.8	71	2	15.7	0.41	12.2	5	1	56.5	4
BUTTE 86	S	63.2	35.6	66	0	1.61	12.9	90	2	66.5	0.42	11.6	5	2	58.2	3
SD3056		62.8	36.9	73	0	1.61	13.7	89	3	67.8	0.43	12.6	5	3	58.6	3
SD8072		63.9	36.6	73	2	1.63	12.4	83	2	67.6	0.44	11.8	5	2	55.8	3
SD8073		62.6	35.5	71	0	1.65	11.9	78	2	66.0	0.45	11.2	5	2	55.3	3
SD8074		61.6	32.7	63	0	1.66	12.3	74	2	65.2	0.44	11.6	5	2	53.8	4
SD8070		63.4	35.8	64	0	1.58	11.8	75	2	66.0	0.40	11.1	5	2	55.5	3
MN88334		61.8	29.8	48	1	1.57	12.3	66	2	66.5	0.41	11.6	5	2	56.5	2
MN88076		62.3	34.1	70	0	1.60	12.9	84	2	66.3	0.41	12.0	5	2	57.9	4
MN88415		63.2	38.8	73	0	1.63	12.7	80	2	64.6	0.43	11.8	5	2	56.2	3
MN89028		63.4	35.8	64	0	1.48	11.8	71	2	62.1	0.40	11.1	5	2	56.2	3
MN89408		60.9	30.7	52	2	1.63	11.7	90	2	63.9	0.53	10.2	5	2	55.0	3
ND671		63.0	32.3	53	0	1.58	12.5	73	2	66.2	0.38	12.2	5	2	56.2	3
ND673		63.0	32.7	71	0	1.59	12.4	83	2	65.2	0.41	11.6	5	2	55.8	4
ND675		64.6	35.6	73	0	1.64	13.3	70	3	66.7	0.45	12.8	5	3	57.9	4
ND681		61.8	36.2	65	0	1.61	13.0	72	3	66.3	0.36	12.0	5	2	56.5	4
ND682		64.1	33.9	50	1	1.58	12.4	84	2	64.6	0.39	11.6	5	2	55.8	3
XW398A4		62.5	38.0	72	0	1.75	12.4	74	2	64.5	0.47	11.8	5	2	57.9	4
XW397A3		62.2	35.5	69	0	1.66	12.5	93	2	67.6	0.49	11.4	5	2	57.6	4
N87-0306		62.3	36.1	69	0	1.58	12.4	77	2	67.0	0.41	11.4	5	2	57.6	4
N88-0022		62.6	36.1	75	0	1.60	12.6	62	2	62.8	0.43	11.8	5	2	55.5	4
N88-3136		62.1	32.1	52	0	1.68	13.2	66	3	64.1	0.38	13.0	5	4	56.5	4
N88-3034		59.8	31.0	39	0	1.84	13.9	66	3	64.1	0.42	13.8	5	4	57.6	4
N86-0348		62.3	32.2	62	1	1.69	12.5	77	2	62.9	0.45	11.7	5	2	55.3	4
MT8849		61.3	35.7	59	0	1.73	12.4	78	2	65.0	0.45	11.5	5	2	54.3	4
BW148		62.4	31.9	60	0	1.68	13.9	85	3	67.6	0.40	13.0	5	4	57.9	4
BW150		62.0	34.4	55	0	1.66	13.3	93	3	66.5	0.48	12.2	5	2	54.3	3
BW152		61.9	35.0	58	0	1.62	13.6	89	3	67.4	0.45	12.4	5	2	54.6	3
PH986-61		56.2	27.6	10	4	1.82	12.5	58	1	61.7	0.50	12.2	5	2	53.8	3
TR983-239		60.2	35.6	47	0	1.77	13.0	64	3	61.8	0.49	12.3	5	2	57.3	4

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=SOUTH DAKOTA STATION=SELBY NURSERY=UNIFORM

TABLE 19 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES														
										TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		53.8	4.75	2	8.0	7.5	153	1	1.7		MI		MJ			MJ			MJ		MJ		MI	MI
CHRIS		57.6	3.50	5	8.5	8.0	167	2	2.7		MI		MI			MI			MJ		MI			
ERA	S	57.0	4.25	5	8.0	8.0	176	2	2.0		MI		MJ			MJ		MI	MJ		MI			
STOA	S	58.5	4.50	5	8.5	8.5	172	2	1.7				MJ	MJ		MJ			MJ		MI			
BUTTE 86	S	58.2	3.25	5	8.0	8.5	178	2	2.0				MJ			MJ			MJ		MI			
SD3056		58.6	3.75	7	8.0	8.5	182	2	2.7				MI			MI			MJ					
SD8072		57.8	4.25	5	8.0	8.5	172	2	2.0				MJ			MJ			MJ		MI			
SD8073		57.3	5.25	5	7.5	7.5	160	2	2.0				MJ			MJ			MJ		MI	MI		MI
SD8074		55.8	5.75	4	8.0	8.0	160	1	1.7				MJ			MJ			MJ	MI	MJ			
SD8070		57.5	4.25	7	8.0	8.0	176	2	2.0				MJ			MJ			MJ					
MN88334		56.5	2.25	2	8.0	7.5	163	1	1.7				MJ			MJ		MI	MJ	MI	MJ			MI
MN88076		57.9	3.75	9	8.0	8.0	180	2	2.0				MJ			MJ			MJ					
MN88415		56.2	4.00	5	8.5	9.0	167	2	2.0				MJ			MJ			MJ		MI			
MN89028		56.2	4.25	5	8.5	8.5	172	2	2.0				MJ			MJ			MJ		MI			
MN89408		55.0	4.00	2	7.5	7.5	160	1	1.7				MJ			MJ			MJ		MJ	MI		MI
ND671		58.2	3.75	9	8.5	8.5	183	2	2.0				MJ			MJ			MJ					
ND673		55.8	5.00	5	8.5	8.5	169	2	2.0				MJ			MJ			MJ		MI			
ND675		59.9	4.75	9	8.0	8.0	186	2	2.7				MI			MI			MJ					
ND681		58.5	4.25	5	8.0	8.0	173	2	2.3				MI			MJ			MJ		MI			
ND682		55.8	5.25	5	8.0	8.5	168	2	2.0				MJ			MJ			MJ		MI			
XW398A4		57.9	4.75	7	8.5	8.0	187	2	2.0				MJ			MJ			MJ					
XW397A3		59.6	4.00	5	8.0	8.0	177	2	2.0				MJ			MJ			MJ		MI			
N87-0306		59.6	4.75	9	8.0	8.0	183	2	2.0				MJ			MJ			MJ					
N88-0022		55.5	4.25	7	8.5	8.5	176	2	2.0				MJ			MJ			MJ					
N88-3136		56.5	4.50	9	8.0	8.0	191	2	3.0				MI						MJ					
N88-3034		57.6	4.00	9	8.0	8.0	191	2	3.0				MI						MJ					
N86-0348		57.3	4.00	7	8.5	8.0	176	2	2.0				MJ			MJ			MJ					
MT8849		54.3	7.75	4	8.0	7.0	163	1	1.7				MJ			MJ			MJ	MI	MJ			MI
BW148		57.9	3.25	7	8.5	8.5	176	2	3.0				MI						MJ					
BW150		56.3	3.75	5	8.0	8.0	176	2	2.3				MI			MJ			MJ		MI			
BW152		54.6	3.75	5	8.0	8.0	173	2	2.3				MI			MJ			MJ		MI			
PH986-61		55.8	7.00	7	8.5	8.0	182	1	1.3		MJ	MI	MJ			MJ			MJ	MI				
TR983-239		57.3	4.25	7	8.5	9.0	177	2	2.3				MI			MJ			MJ					

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	29.0	8	13.9	47.7	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	7.5	7.5	154
MAJOR FAULTING VALUES	56.9	26.0	18	12.9	45.7	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	5.0	5.0	144

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=MINNESOTA STATION=MORRIS NURSERY=UNIFORM

TABLE 20

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		56.9	23.4	16	6	1.63	13.4	68	1	60.2	0.53	12.7	5	1	57.3	3
CHRIS		61.5	29.9	52	0	1.55	14.8	87	4	66.9	0.39	13.9	5	4	60.8	4
ERA	S	58.2	26.3	28	5	1.66	13.9	80	2	68.1	0.50	11.8	5	2	57.3	3
STOA	S	60.6	32.7	53	1	1.65	14.1	76	4	68.2	0.40	12.9	5	3	59.6	4
BUTTE 86	S	61.9	37.2	75	0	1.57	14.4	93	4	67.8	0.40	12.7	5	3	58.6	3
SD3056		61.4	37.3	75	0	1.54	14.7	90	4	67.9	0.44	13.3	5	4	59.0	3
SD8072		61.8	37.6	77	0	1.63	14.0	82	4	68.3	0.42	12.8	5	3	57.9	2
SD8073		61.1	36.6	76	0	1.58	13.7	89	3	67.6	0.44	12.4	5	2	58.6	3
SD8074		60.3	33.4	69	0	1.57	13.9	85	3	66.2	0.42	12.7	5	3	57.6	3
SD8070		61.1	34.8	64	0	1.64	14.1	86	4	67.8	0.40	13.0	5	4	56.9	2
MN88334		60.4	29.5	41	1	1.50	13.3	84	3	70.5	0.39	12.4	5	2	58.6	2
MN88076		62.2	36.5	76	0	1.58	14.3	92	4	69.2	0.41	13.1	5	4	61.1	3
MN88415		61.3	35.8	56	2	1.64	13.7	76	3	65.7	0.42	12.8	5	2	56.2	2
MN89028		60.6	33.9	62	1	1.48	13.4	82	3	65.8	0.39	12.3	5	1	58.2	2
MN89408		59.2	30.0	40	3	1.58	12.7	97	2	65.7	0.55	10.9	5	1	53.2	2
ND671		62.0	33.4	66	1	1.69	15.3	89	4	68.9	0.40	14.3	5	4	62.5	3
ND673		62.4	37.5	76	0	1.56	14.4	80	4	69.7	0.40	13.6	5	4	60.5	4
ND675		62.6	36.8	76	0	1.56	14.6	88	4	69.7	0.43	13.5	5	4	58.6	3
ND681		61.7	39.2	76	0	1.67	14.8	74	4	69.9	0.37	14.1	5	4	60.5	3
ND682		62.6	33.8	55	0	1.66	14.2	89	4	66.5	0.42	12.8	5	3	59.6	3
XW398A4		60.2	33.4	51	1	1.62	13.8	81	3	68.3	0.48	13.0	5	4	61.1	5
XW397A3		58.9	30.7	47	1	1.72	14.3	101	4	68.3	0.51	12.7	5	3	60.8	4
N87-0306		60.3	33.4	57	0	1.61	14.2	85	4	70.2	0.43	13.0	5	4	61.4	3
N88-0022		59.1	32.6	51	1	1.67	14.1	62	4	62.7	0.49	13.1	5	2	59.6	2
N88-3136		61.3	32.7	64	0	1.73	14.5	76	4	66.8	0.43	13.5	5	4	59.3	3
N88-3034		58.8	32.6	58	0	1.73	15.3	79	4	65.2	0.43	14.5	5	3	59.3	3
N86-0348		59.2	29.8	50	0	1.70	13.9	70	3	64.9	0.48	13.0	5	3	57.6	2
MT8849		59.7	35.6	63	1	1.70	13.9	86	3	64.9	0.45	12.6	5	2	57.3	3
BW148		60.9	33.4	65	0	1.66	15.4	89	4	66.8	0.45	14.4	5	4	59.6	3
BW150		60.5	36.1	70	0	1.60	14.8	86	4	66.8	0.44	13.5	5	4	57.6	2
BW152		61.4	36.9	74	0	1.62	14.7	90	4	67.3	0.46	13.7	5	4	56.5	2
PH986-61		49.1	19.5	1	30	1.96	14.3	65	1	56.5	0.60	13.8	5	2	58.2	4
TR983-239		59.6	35.1	53	1	1.63	13.7	75	3	64.4	0.46	12.7	5	2	60.3	2

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=MINNESOTA STATION=MORRIS NURSERY=UNIFORM

TABLE 20 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES															
										TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		57.3	5.00	7	85	80	177	2	1.3	MJ	MJ		MI	MJ		MI			MJ				MI	
CHRIS		60.8	3.25	9	85	80	190	3	3.7		MI								MI				MI	
ERA	S	57.3	4.50	9	85	80	194	2	2.0		MJ		MI			MJ			MJ				MI	
STOA	S	59.6	4.25	9	85	80	192	2	3.0							MI			MJ				MI	
BUTTE 86	S	58.6	3.25	7	85	80	187	2	3.0							MI			MJ				MI	
SD3056		59.0	3.50	9	80	90	203	2	3.3										MJ					
SD8072		57.9	3.75	7	80	80	181	2	3.0							MI		MI	MJ				MI	
SD8073		58.6	4.50	7	80	80	182	2	2.3				MI			MJ			MJ				MI	
SD8074		57.6	5.50	9	80	80	192	2	2.7				MI			MI			MJ				MI	
SD8070		56.9	4.50	9	80	80	206	2	3.3									MI	MJ				MI	
MN88334		58.6	3.00	7	80	85	180	2	2.3		MI		MI			MJ		MI	MJ					
MN88076		61.1	4.00	9	85	75	200	3	3.7										MI				MI	
MN88415		56.2	5.00	7	90	80	178	2	2.3				MI	MI		MI		MI	MJ				MI	
MN89028		58.2	5.00	7	85	80	198	2	2.0				MI	MI		MJ		MI	MJ				MI	
MN89408		53.2	5.50	2	80	80	167	1	1.3				MJ	MI		MJ		MI	MJ		MJ		MI	MI
ND671		62.5	3.00	9	85	80	216	4	4.0														MI	
ND673		60.5	4.75	9	85	80	206	3	3.7										MI				MI	
ND675		58.6	4.50	9	85	80	205	2	3.3										MJ				MI	
ND681		60.5	4.00	9	85	80	203	3	3.7										MI				MI	
ND682		59.6	4.50	7	85	85	193	2	3.0							MI			MJ					
XW398A4		61.1	5.00	9	80	75	214	3	3.3				MI						MI				MI	
XW397A3		60.8	3.75	9	85	80	197	3	3.3							MI			MI				MI	
N87-0306		61.4	4.00	9	80	75	216	3	3.7										MI				MI	
N88-0022		59.6	4.00	9	80	75	204	2	2.7					MJ				MI	MJ				MI	
N88-3136		59.3	4.00	9	80	75	211	2	3.3										MJ				MI	
N88-3034		59.3	3.50	9	80	75	217	2	3.0					MI					MJ				MI	
N86-0348		57.6	3.50	7	85	85	197	2	2.7		MI		MI	MI				MI	MJ					
MT8849		57.3	6.75	7	85	85	204	1	2.0				MI	MI		MI			MJ	MI				
BW148		59.6	3.50	7	80	80	192	2	3.3										MJ				MI	
BW150		57.6	3.00	7	85	80	200	2	3.3									MI	MJ				MI	
BW152		56.5	3.00	7	85	80	190	2	3.3									MI	MJ				MI	
PH986-61		58.2	6.50	9	85	80	210	1	1.3	MJ	MJ	MJ		MJ	MI				MJ	MI			MI	
TR983-239		60.3	3.50	9	85	80	209	2	2.3				MI	MI		MI		MI	MJ				MI	

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	30.0	8	13.9	65.9	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	170
MAJOR FAULTING VALUES	56.9	27.0	18	12.9	63.9	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	160

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=MINNESOTA STATION=ST. PAUL NURSERY=UNIFORM

TABLE 21

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		53.8	21.1	19	12	1.99	15.9	69	2	57.8	0.71	14.4	5	2	59.3	4
CHRIS		56.8	23.6	33	8	1.89	16.9	77	3	61.3	0.53	15.8	5	4	60.5	4
ERA	S	54.6	23.1	28	8	2.00	15.2	73	3	62.5	0.60	13.4	5	4	56.2	3
STOA	S	55.1	24.9	40	5	2.08	17.0	72	3	59.8	0.57	15.8	5	4	63.1	5
BUTTE 86	S	57.6	33.3	64	0	1.98	17.4	78	4	62.3	0.56	16.2	5	4	63.4	5
SD3056		56.9	30.5	66	1	1.92	17.0	91	3	63.8	0.58	15.9	5	4	63.1	4
SD8072		57.6	31.1	60	1	2.07	17.5	80	4	64.3	0.58	16.5	5	4	60.0	4
SD8073		55.8	28.1	52	1	2.08	17.3	77	3	60.8	0.62	16.1	5	3	60.5	7
SD8074		56.6	29.8	55	1	2.00	17.0	76	3	60.3	0.54	15.9	5	4	59.3	7
SD8070		57.7	31.5	54	2	1.98	16.3	81	4	61.6	0.53	14.7	5	4	57.3	3
MN88334		57.4	26.7	36	6	1.87	15.8	63	4	62.5	0.47	14.6	5	4	56.9	2
MN88076		57.4	29.1	53	3	1.94	16.7	75	4	62.1	0.54	14.9	5	4	59.0	4
MN88415		57.0	28.8	51	4	2.07	16.1	77	4	62.3	0.49	14.6	5	4	57.9	3
MN89028		55.6	26.3	50	2	1.95	16.1	68	3	57.8	0.55	14.9	5	3	62.7	4
MN89408		54.9	23.7	36	6	2.03	15.8	81	3	59.5	0.68	14.1	5	3	59.3	5
ND671		57.8	30.1	64	0	2.06	18.0	78	4	62.0	0.48	17.2	5	4	64.0	4
ND673		58.0	31.8	64	1	1.97	16.8	70	4	63.8	0.54	15.7	5	4	60.0	5
ND675		60.3	32.8	66	0	1.95	17.6	82	4	63.5	0.54	16.6	5	4	61.1	7
ND681		57.1	31.0	61	1	1.99	16.9	71	4	65.0	0.48	15.9	5	4	61.4	4
ND682		59.0	31.8	57	3	1.88	16.6	78	4	61.3	0.51	15.0	5	4	58.2	4
XW398A4		55.8	31.0	48	3	2.15	15.8	66	3	59.8	0.68	14.7	5	3	58.2	4
XW397A3		55.8	29.5	47	4	1.99	16.8	90	3	63.0	0.66	15.2	5	3	58.6	3
N87-0306		56.9	31.0	48	2	1.96	16.1	66	3	62.1	0.54	14.9	5	4	59.6	4
N88-0022		56.3	29.2	60	2	1.92	16.9	64	3	59.0	0.55	15.2	5	3	57.3	3
N88-3136		58.3	30.6	54	3	1.86	15.9	62	4	62.5	0.47	14.7	5	4	62.7	5
N88-3034		54.2	26.4	32	4	1.98	17.3	71	3	62.8	0.52	16.4	5	4	65.4	4
N86-0348		55.7	26.0	40	4	2.06	16.4	62	3	57.8	0.62	15.2	5	2	60.8	4
MT-8849		57.5	31.0	46	2	1.97	15.6	80	4	61.3	0.59	13.7	5	4	58.6	5
BW148		55.2	27.0	49	3	2.02	18.3	76	3	61.3	0.61	17.4	5	3	62.7	4
BW150		53.2	23.5	30	8	2.00	17.4	80	3	60.0	0.63	16.3	5	3	60.3	3
BW152		54.2	24.3	33	9	1.95	17.5	79	3	61.5	0.60	16.4	5	4	60.0	3
PH986-61		54.2	28.0	29	6	2.07	15.3	57	3	57.3	0.60	14.0	5	2	58.6	5
TR983-239		57.4	36.1	60	2	2.03	15.8	65	4	60.3	0.62	14.4	5	3	60.3	4

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=MINNESOTA STATION=ST. PAUL NURSERY=UNIFORM

TABLE 21 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES														
										TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		59.3	4.00	7	80	85	184	2	2.0	MJ	MJ	MI		MI	MJ				MJ					
CHRIS		60.5	3.50	9	80	80	200	3	3.3	MJ	MI	MI							MI				MI	
ERA	S	56.2	5.00	9	85	80	195	2	3.0	MJ	MI	MI			MI				MJ				MI	
STOA	S	63.1	5.00	9	80	80	206	4	3.7	MJ	MI				MI								MI	
BUTTE 86	S	63.4	4.00	9	80	80	199	4	4.0	MI													MI	
SD3056		63.1	4.50	9	80	80	217	4	3.7	MJ					MI								MI	
SD8072		60.0	4.50	9	80	80	197	2	3.3	MI					MI				MJ				MI	
SD8073		60.5	6.00	7	80	75	192	2	2.7	MJ					MJ		MI	MI	MI				MI	
SD8074		59.3	6.50	7	80	75	199	1	2.7	MJ							MI	MJ	MI				MI	
SD8070		57.3	5.00	7	85	85	202	2	3.3	MI								MJ						
MN88334		56.9	3.50	7	80	85	188	2	3.3	MI							MI	MJ						
MN88076		59.0	4.50	9	85	80	202	2	3.3	MI								MJ					MI	
MN88415		57.9	5.25	7	80	80	179	1	3.0	MI								MJ					MI	MI
MN89028		62.7	4.25	9	80	80	200	4	3.3	MJ				MI									MI	
MN89408		59.3	5.00	9	80	80	203	2	2.7	MJ	MI				MJ				MJ				MI	
ND671		64.0	4.25	9	85	75	222	4	4.0	MI													MI	
ND673		60.0	5.50	9	85	85	211	2	3.3										MJ					
ND675		61.1	6.00	7	85	80	212	2	3.3								MI	MI	MI				MI	
ND681		61.4	4.50	9	80	80	202	3	3.7	MI									MI				MI	
ND682		58.2	5.50	7	85	80	187	2	3.3										MJ				MI	
XW398A4		58.2	5.50	9	80	75	222	2	2.7	MJ					MJ				MJ				MI	
XW397A3		58.6	4.00	9	85	80	208	2	2.7	MJ					MJ				MJ				MI	
N87-0306		59.6	4.75	9	85	75	216	2	3.0	MJ									MJ				MI	
N88-0022		57.3	4.50	9	85	75	217	2	2.7	MJ				MI					MJ				MI	
N88-3136		62.7	4.75	9	80	80	223	4	4.0														MI	
N88-3034		65.4	4.00	9	80	70	220	4	3.7	MJ													MI	
N86-0348		60.8	4.50	9	80	75	211	3	2.7	MJ				MI	MJ				MI				MI	
MT-8849		58.6	7.75	7	85	80	195	1	3.0	MI					MI				MJ	MI			MI	
BW148		62.7	3.50	9	80	85	205	4	3.3	MJ					MJ									
BW150		60.3	4.00	9	80	80	219	2	2.7	MJ	MI	MI			MJ				MJ				MI	
BW152		60.0	3.25	9	80	70	222	2	3.0	MJ	MI	MI			MI				MJ				MI	
PH986-61		58.6	7.00	9	90	80	213	1	2.0	MJ				MJ	MI				MJ	MI			MI	
TR983-239		60.3	4.75	9	85	80	203	2	3.0	MI					MJ				MJ				MI	

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	25.0	8	13.9	59.4	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	179
MAJOR FAULTING VALUES	56.9	22.0	18	12.9	57.4	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	169

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=WISCONSIN STATION=MADISON NURSERY=UNIFORM

TABLE 22

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		55.9	23.7	21	13	2.00	15.5	65	3	57.0	0.60	14.5	4	3	60.8	5
CHRIS		55.7	21.7	18	17	1.97	16.8	86	1	55.8	0.59	16.5	4	2	64.0	5
ERA	S	51.6	21.5	13	13	2.21	15.7	59	2	52.1	0.71	14.8	4	1	60.3	4
STOA	S	57.6	28.6	41	3	1.83	15.8	78	4	62.8	0.50	14.7	5	4	60.3	4
BUTTE 86	S	59.2	31.9	41	8	1.62	15.6	81	4	65.8	0.45	14.6	5	4	59.6	5
SD3056		61.3	38.9	76	0	1.77	16.5	87	4	68.4	0.47	15.5	5	4	60.8	4
SD8072		59.2	30.6	47	2	1.90	16.3	80	4	64.4	0.53	15.5	5	4	59.3	5
SD8073		60.0	32.6	53	1	1.75	15.7	78	4	63.9	0.50	14.6	5	4	57.3	7
SD8074		59.1	29.2	48	4	1.68	15.3	75	4	64.1	0.49	14.6	5	4	59.6	8
SD8070		59.1	31.6	44	4	1.80	15.6	77	4	64.7	0.49	14.1	5	4	59.3	5
MN88334		55.2	22.7	12	14	1.90	15.4	52	3	56.5	0.49	14.6	4	3	60.3	4
MN88076		59.0	32.6	54	2	1.78	15.6	74	4	64.3	0.45	14.3	5	4	60.5	5
MN88415		58.4	28.9	35	5	1.80	16.0	78	4	60.9	0.51	15.5	5	4	56.5	4
MN89028		57.2	27.3	29	5	1.78	15.1	65	4	59.1	0.50	14.2	5	4	57.3	4
MN89408		55.1	25.1	17	10	1.92	15.5	81	3	58.3	0.68	14.3	5	3	59.0	4
ND671		61.6	28.8	50	2	1.77	16.3	81	4	65.7	0.44	15.5	5	4	62.1	6
ND673		60.9	34.2	59	2	1.69	15.4	77	4	61.2	0.45	14.4	5	4	59.3	7
ND675		62.0	35.0	64	1	1.73	17.4	79	4	65.6	0.50	16.7	5	4	65.7	6
ND681		59.1	32.5	50	3	1.83	16.1	74	4	61.4	0.44	15.1	5	4	61.4	5
ND682		61.0	30.5	37	5	1.72	15.5	84	4	62.2	0.46	14.2	5	4	60.5	5
XW398A4		56.6	29.6	23	6	2.05	16.2	67	3	54.6	0.67	15.6	5	1	63.7	7
XW397A3		58.1	29.8	30	14	1.80	15.7	91	4	65.6	0.56	14.4	5	4	59.6	5
N87-0306		59.0	31.4	28	7	1.82	15.5	76	4	61.8	0.49	14.6	5	4	60.0	5
N88-0022		59.4	33.8	61	0	1.83	15.7	62	4	59.1	0.49	14.6	5	4	59.6	5
N88-3136		56.2	23.0	21	13	1.95	16.4	60	3	52.8	0.54	15.8	4	2	61.1	5
N88-3034		53.6	25.1	14	6	2.10	16.9	71	3	56.5	0.55	16.0	5	3	60.8	5
N86-0348		57.4	26.5	29	5	1.97	16.0	67	4	54.3	0.57	14.9	5	2	60.8	5
MT8849		56.8	30.2	38	4	2.00	16.1	78	3	55.7	0.62	14.6	5	1	57.6	8
BW148		59.4	27.7	44	6	1.80	17.1	82	4	64.4	0.44	16.2	5	4	61.8	5
BW150		56.6	27.8	29	8	1.96	17.1	84	3	58.1	0.56	15.8	5	3	60.0	5
BW152		58.2	27.5	29	15	1.86	17.0	82	4	58.4	0.56	16.0	5	4	60.8	5
PH986-61		56.4	32.1	36	3	1.91	15.1	58	3	55.5	0.55	14.2	5	2	60.3	7
TR983-239		60.1	39.2	56	1	1.85	15.9	70	4	56.3	0.59	14.7	5	3	60.0	7

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=WISCONSIN STATION=MADISON NURSERY=UNIFORM

TABLE 22 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		60.8	3.50	9	80	85	183	3	3.0	MJ	MI	MI		MI	MI				MI					
CHRIS		64.0	2.50	9	85	80	196	3	2.0	MJ	MJ	MJ		MJ	MI					MI				MI
ERA	S	60.3	3.50	9	80	80	200	2	1.7	MJ	MJ	MI		MJ	MJ				MJ					MI
STOA	S	60.3	4.25	9	85	85	189	2	3.3	MI									MJ					
BUTTE 86	S	59.6	3.75	7	80	80	175	2	3.3			MI							MJ					MI
SD3056		60.8	4.00	9	80	80	195	3	3.7										MI					MI
SD8072		59.3	4.25	7	80	80	183	2	3.3										MJ					MI
SD8073		57.3	5.50	7	80	80	172	2	3.3									MI	MJ					MI
SD8074		59.6	5.50	7	80	80	181	2	3.3									MI	MJ					MI
SD8070		59.3	4.75	9	80	85	189	2	3.3										MJ					
MN88334		60.3	3.00	7	80	85	180	2	2.7	MJ	MI	MI		MI					MJ					
MN88076		60.5	4.50	9	85	85	190	3	3.7										MI					
MN88415		56.5	6.00	4	85	80	178	1	3.0										MJ	MI	MJ			MI
MN89028		57.3	6.00	7	85	80	180	1	3.0	MI									MJ	MI				MI
MN89408		59.0	4.25	9	80	85	192	2	2.7	MJ	MI	MI			MJ				MJ					
ND671		62.1	4.00	9	80	85	197	4	4.0															
ND673		59.3	5.25	7	80	85	187	2	3.3									MI	MJ					
ND675		65.7	5.25	9	80	80	203	4	4.0															MI
ND681		61.4	4.75	9	80	80	195	3	3.7										MI					MI
ND682		60.5	5.00	7	85	85	187	3	3.7										MI					
XW398A4		63.7	6.50	9	80	75	222	3	2.3	MJ				MJ	MJ			MI		MI				MI
XW397A3		59.6	4.25	9	80	80	196	2	3.3			MI							MJ					MI
N87-0306		60.0	4.50	9	80	80	209	2	3.3										MJ					MI
N88-0022		59.6	4.00	9	90	85	204	2	3.3										MJ					
N88-3136		61.1	4.50	9	85	80	215	3	2.7	MJ	MI	MI		MJ					MI					MI
N88-3034		60.8	3.75	9	80	80	207	3	3.0	MJ	MI			MI					MI					MI
N86-0348		60.8	4.25	9	80	80	195	3	3.0	MI				MJ	MI				MI					MI
MT8849		59.6	8.75	4	85	85	178	1	1.7	MJ				MJ	MJ			MI	MJ	MJ	MJ			
BW148		61.8	3.50	4	85	85	179	1	3.0										MI		MJ			
BW150		60.0	3.50	9	80	80	197	2	2.7	MJ		MI		MI					MJ					MI
BW152		60.8	2.75	9	80	80	193	2	3.3			MI							MI	MI				MI
PH986-61		60.3	6.25	9	85	75	205	1	2.0	MJ				MJ				MI	MJ	MI				MI
TR983-239		60.0	5.00	9	80	80	200	2	3.0					MI	MI			MI	MJ					MI

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	25.2	8	13.9	58.1	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	167
MAJOR FAULTING VALUES	56.9	22.2	18	12.9	56.1	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	157

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 23

VARIETY=BUTTE 86

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.95	2.36	57.30	63.20	5.56	3.93
K_WT	33.67	2.78	29.40	37.20	7.71	8.25
LG	57.00	18.29	28.00	75.00	334.40	32.08
SM	1.83	3.13	0.00	8.00	9.77	170.46
WHT_ASH	1.70	0.15	1.57	1.98	0.02	8.78
WHT_PRO	14.88	1.85	12.80	17.40	3.42	12.42
HARD	85.67	5.68	78.00	93.00	32.27	6.63
EXTR	65.43	1.88	62.30	67.80	3.53	2.87
FL_ASH	0.47	0.06	0.40	0.56	0.00	12.15
FL_PRO	13.72	1.99	11.60	16.20	3.94	14.47
MIXO	3.50	1.22	2.00	5.00	1.50	34.99
BAKE ABS	60.18	1.93	58.20	63.40	3.74	3.21
LOAF VOL	188.00	15.72	175.00	214.00	247.20	8.36

VARIETY=BW148

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.13	2.65	55.20	62.40	7.01	4.48
K_WT	29.45	3.22	25.30	33.40	10.34	10.92
LG	49.33	16.74	19.00	65.00	280.27	33.93
SM	2.50	2.35	0.00	6.00	5.50	93.81
WHT_ASH	1.80	0.13	1.66	2.02	0.02	7.28
WHT_PRO	15.72	1.77	13.80	18.30	3.13	11.26
HARD	81.50	4.85	76.00	89.00	23.50	5.95
EXTR	65.40	2.27	61.30	67.60	5.16	3.47
FL_ASH	0.47	0.08	0.40	0.61	0.01	16.13
FL_PRO	15.24	1.68	13.00	17.40	2.83	11.03
MIXO	3.67	0.82	3.00	5.00	0.67	22.27
BAKE_ABS	60.22	1.88	57.90	62.70	3.54	3.13
LOAF_VOL	186.00	10.77	176.00	205.00	116.00	5.79

VARIETY=BW150

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.83	3.14	53.20	62.00	9.87	5.43
K WT	29.73	4.72	23.50	36.10	22.29	15.88
LG	44.17	17.63	28.00	70.00	310.97	39.93
SM	3.67	3.67	0.00	8.00	13.47	100.08
WHT_ASH	1.76	0.17	1.60	2.00	0.03	9.89
WHT_PRO	15.25	1.74	13.30	17.40	3.03	11.41
HARD	83.83	5.74	76.00	93.00	32.97	6.85
EXTR	63.48	3.59	58.10	66.80	12.89	5.66
FL_ASH	0.50	0.08	0.42	0.63	0.01	15.77
FL_PRO	14.22	1.65	12.20	16.30	2.73	11.63
MIXO	2.67	1.37	1.00	5.00	1.87	51.23
BAKE_ABS	57.67	2.06	55.30	60.30	4.24	3.57
LOAF_VOL	193.83	15.17	176.00	219.00	230.17	7.83

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 24

VARIETY=BW152

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.63	2.98	54.20	61.90	8.86	5.08
K_WT	30.48	5.19	24.30	36.90	26.95	17.03
LG	48.17	18.58	29.00	74.00	345.37	38.58
SM	4.67	6.09	0.00	15.00	37.07	130.46
WHT_ASH	1.72	0.15	1.59	1.95	0.02	8.57
WHT_PRO	15.37	1.65	13.60	17.50	2.73	10.76
HARD	84.17	5.56	77.00	90.00	30.97	6.61
EXTR	64.10	3.68	58.40	67.40	13.56	5.74
FL_ASH	0.50	0.07	0.40	0.60	0.01	15.00
FL_PRO	14.45	1.63	12.40	16.40	2.64	11.25
MIXO	2.83	1.17	2.00	5.00	1.37	41.26
BAKE_ABS	57.52	2.58	54.60	60.80	6.66	4.49
LOAF_VOL	190.83	17.41	173.00	222.00	302.97	9.12

VARIETY=CHRIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.88	2.73	55.70	62.20	7.47	4.64
K_WT	25.93	3.52	21.70	29.90	12.39	13.57
LG	33.50	15.53	14.00	52.00	241.10	46.35
SM	5.83	6.37	0.00	17.00	40.57	109.19
WHT_ASH	1.72	0.17	1.55	1.97	0.03	10.05
WHT_PRO	14.98	1.59	13.00	16.90	2.53	10.62
HARD	81.17	5.49	74.00	87.00	30.17	6.77
EXTR	63.23	4.14	55.80	66.90	17.16	6.55
FL_ASH	0.46	0.08	0.39	0.59	0.01	17.03
FL_PRO	14.43	1.49	12.50	16.50	2.21	10.29
MIXO	3.83	0.98	2.00	5.00	0.97	25.65
BAKE_ABS	60.37	2.11	57.60	64.00	4.47	3.50
LOAF_VOL	190.00	16.14	167.00	211.00	260.40	8.49

VARIETY=ERA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.20	3.48	51.60	61.50	12.12	6.20
K_WT	23.98	2.77	20.50	27.60	7.67	11.55
LG	20.17	10.89	4.00	32.00	118.57	53.99
SM	8.33	4.37	2.00	13.00	19.07	52.40
WHT_ASH	1.86	0.22	1.64	2.21	0.05	11.65
WHT_PRO	13.88	1.49	11.80	15.70	2.21	10.72
HARD	73.00	7.46	59.00	80.00	55.60	10.21
EXTR	63.57	5.94	52.10	68.10	35.34	9.35
FL_ASH	0.55	0.09	0.47	0.71	0.01	16.19
FL_PRO	12.73	1.42	10.90	14.80	2.01	11.15
MIXO	3.00	0.63	2.00	4.00	0.40	21.08
BAKE_ABS	57.55	1.79	55.50	60.30	3.21	3.11
LOAF_VOL	193.00	13.51	176.00	213.00	182.40	7.00

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 25

VARIETY=MARQUIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.15	2.69	53.00	60.60	7.23	4.79
K_WT	22.60	2.93	17.90	26.70	8.61	12.98
LG	15.33	8.31	3.00	25.00	69.07	54.20
SM	9.33	7.09	0.00	20.00	50.27	75.96
WHT_ASH	1.79	0.18	1.55	2.00	0.03	10.20
WHT_PRO	14.00	1.62	11.70	15.90	2.62	11.55
HARD	71.17	5.27	65.00	80.00	27.77	7.40
EXTR	61.93	4.48	57.00	68.90	20.06	7.23
FL_ASH	0.56	0.09	0.47	0.71	0.01	15.56
FL_PRO	13.18	1.32	11.10	14.50	1.75	10.04
MIXO	3.33	1.03	2.00	5.00	1.07	30.98
BAKE_ABS	58.02	2.43	53.80	60.80	5.90	4.19
LOAF_VOL	182.67	24.47	153.00	227.00	598.67	13.39

VARIETY=MN88076

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.57	2.28	57.00	62.30	5.20	3.83
K_WT	32.05	3.56	26.70	36.50	12.64	11.09
LG	58.83	13.93	37.00	76.00	194.17	23.68
SM	1.17	1.33	0.00	3.00	1.77	113.93
WHT_ASH	1.71	0.14	1.58	1.94	0.02	7.93
WHT_PRO	14.57	1.49	12.90	16.70	2.21	10.20
HARD	80.67	6.80	74.00	92.00	46.27	8.43
EXTR	65.47	2.39	62.10	69.20	5.69	3.64
FL_ASH	0.46	0.05	0.41	0.54	0.00	10.83
FL_PRO	13.40	1.17	12.00	14.90	1.36	8.70
MIXO	3.67	0.82	3.00	5.00	0.67	22.27
BAKE_ABS	59.40	1.45	57.60	61.10	2.11	2.45
LOAF_VOL	195.50	12.68	180.00	215.00	160.70	6.48

VARIETY=MN88334

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.05	2.54	55.20	61.80	6.47	4.38
K_WT	25.67	3.63	20.90	29.80	13.19	14.15
LG	28.00	15.58	12.00	48.00	242.80	55.65
SM	5.67	4.80	1.00	14.00	23.07	84.75
WHT_ASH	1.67	0.18	1.50	1.90	0.03	10.76
WHT_PRO	13.98	1.40	12.30	15.80	1.97	10.03
HARD	66.67	10.42	52.00	84.00	108.67	15.64
EXTR	64.05	4.67	56.50	70.50	21.85	7.30
FL_ASH	0.43	0.04	0.38	0.49	0.00	10.27
FL_PRO	13.32	1.24	11.60	14.60	1.54	9.31
MIXO	2.33	0.82	2.00	4.00	0.67	34.99
BAKE ABS	58.02	1.36	56.50	60.30	1.86	2.35
LOAF VOL	179.50	10.67	163.00	193.00	113.90	5.95

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 26

VARIETY=MN88415

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.92	2.19	57.00	63.20	4.81	3.66
K_WT	32.87	4.25	28.80	38.80	18.09	12.94
LG	50.83	15.68	31.00	73.00	245.77	30.84
SM	2.67	1.75	0.00	5.00	3.07	65.67
WHT_ASH	1.77	0.17	1.63	2.07	0.03	9.58
WHT_PRO	14.27	1.52	12.70	16.10	2.32	10.68
HARD	77.67	2.58	74.00	81.00	6.67	3.32
EXTR	63.60	1.73	60.90	65.70	2.98	2.72
FL_ASH	0.47	0.04	0.42	0.53	0.00	9.52
FL_PRO	13.47	1.44	11.80	15.50	2.09	10.73
MIXO	3.17	1.17	2.00	5.00	1.37	36.92
BAKE_ABS	56.88	0.92	56.20	58.20	0.84	1.61
LOAF_VOL	178.17	12.06	167.00	200.00	145.37	6.77

VARIETY=MN89028

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.05	2.96	55.60	63.40	8.74	5.01
K_WT	30.48	4.10	26.30	35.80	16.84	13.46
LG	47.83	16.52	26.00	64.00	272.97	34.54
SM	2.17	1.94	0.00	5.00	3.77	89.57
WHT_ASH	1.67	0.18	1.48	1.95	0.03	10.82
WHT_PRO	13.87	1.66	11.80	16.10	2.77	12.00
HARD	72.00	6.93	65.00	82.00	48.00	9.62
EXTR	61.80	2.92	57.80	65.80	8.55	4.73
FL_ASH	0.46	0.06	0.39	0.55	0.00	13.39
FL_PRO	13.05	1.62	11.10	14.90	2.62	12.39
MIXO	3.00	0.89	2.00	4.00	0.80	29.81
BAKE_ABS	58.48	2.57	56.20	62.70	6.60	4.39
LOAF_VOL	192.33	18.13	172.00	222.00	328.67	9.43

VARIETY=MN89408

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.03	2.71	54.20	60.90	7.34	4.75
K_WT	26.88	3.36	23.00	30.70	11.27	12.49
LG	32.83	16.86	8.00	52.00	284.17	51.34
SM	6.17	4.02	2.00	12.00	16.17	65.20
WHT_ASH	1.78	0.17	1.58	2.03	0.03	9.73
WHT_PRO	13.77	1.84	11.70	15.80	3.39	13.38
HARD	88.50	6.80	81.00	97.00	46.30	7.69
EXTR	61.97	3.07	58.30	65.70	9.40	4.95
FL_ASH	0.61	0.06	0.53	0.68	0.00	10.46
FL_PRO	12.37	1.89	10.20	14.30	3.56	15.25
MIXO	3.33	1.03	2.00	5.00	1.07	30.98
BAKE_ABS	56.88	2.48	53.20	59.30	6.17	4.37
LOAF_VOL	186.00	23.89	160.00	222.00	570.80	12.84

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 27

VARIETY=MT8849

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.08	2.34	54.60	61.30	5.47	4.03
K_WT	31.88	3.29	27.20	35.70	10.80	10.31
LG	45.33	14.54	23.00	63.00	211.47	32.08
SM	2.00	1.41	0.00	4.00	2.00	70.71
WHT_ASH	1.83	0.13	1.70	2.00	0.02	7.27
WHT_PRO	14.25	1.42	12.40	16.10	2.03	9.99
HARD	81.33	3.27	78.00	86.00	10.67	4.02
EXTR	62.35	3.56	55.70	65.00	12.65	5.70
FL_ASH	0.52	0.07	0.45	0.62	0.01	13.94
FL_PRO	13.02	1.15	11.50	14.60	1.33	8.85
MIXO	4.33	1.97	3.00	8.00	3.87	45.38
BAKE_ABS	57.20	1.91	54.30	59.60	3.65	3.34
LOAF_VOL	184.50	16.18	163.00	204.00	261.90	8.77

VARIETY=ND671

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.58	2.33	57.50	63.00	5.43	3.85
K_WT	30.63	2.90	26.00	33.40	8.43	9.48
LG	52.17	17.89	18.00	66.00	320.17	34.30
SM	1.17	1.17	0.00	3.00	1.37	100.20
WHT_ASH	1.79	0.16	1.58	2.06	0.03	8.96
WHT_PRO	15.12	2.06	12.50	18.00	4.26	13.66
HARD	79.67	6.31	73.00	89.00	39.87	7.93
EXTR	65.05	2.81	61.50	68.90	7.87	4.31
FL_ASH	0.43	0.04	0.38	0.48	0.00	8.91
FL_PRO	14.50	1.94	12.20	17.20	3.77	13.39
MIXO	3.83	1.17	3.00	6.00	1.37	30.50
BAKE_ABS	61.83	2.03	58.20	64.00	4.11	3.28
LOAF_VOL	206.67	19.91	183.00	233.00	396.27	9.63

VARIETY=ND673

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.57	2.01	58.00	63.00	4.05	3.32
K_WT	32.90	3.14	27.90	37.50	9.85	9.54
LG	62.00	13.19	38.00	76.00	174.00	21.28
SM	1.17	0.98	0.00	2.00	0.97	84.27
WHT_ASH	1.70	0.14	1.56	1.97	0.02	8.52
WHT_PRO	14.57	1.68	12.40	16.80	2.81	11.51
HARD	79.17	6.11	70.00	88.00	37.37	7.72
EXTR	65.13	2.79	61.20	69.70	7.78	4.28
FL_ASH	0.45	0.05	0.40	0.54	0.00	11.06
FL_PRO	13.68	1.65	11.60	15.70	2.72	12.05
MIXO	4.33	1.51	3.00	7.00	2.27	34.74
BAKE_ABS	59.18	1.73	55.80	60.50	2.98	2.92
LOAF_VOL	196.33	19.51	169.00	221.00	380.67	9.94

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 28

VARIETY=ND675

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.95	1.73	59.80	64.60	3.00	2.80
K_WT	33.95	2.44	29.90	36.80	5.96	7.19
LG	65.83	9.81	48.00	76.00	96.17	14.90
SM	0.33	0.52	0.00	1.00	0.27	154.92
WHT_ASH	1.72	0.13	1.56	1.95	0.02	7.82
WHT_PRO	15.45	1.91	13.30	17.60	3.66	12.38
HARD	80.50	5.96	70.00	88.00	35.50	7.40
EXTR	66.23	2.02	63.50	69.70	4.08	3.05
FL_ASH	0.48	0.04	0.43	0.54	0.00	8.09
FL_PRO	14.70	1.90	12.70	16.70	3.62	12.94
MIXO	4.83	1.47	3.00	7.00	2.17	30.45
BAKE ABS	61.28	2.53	58.60	65.70	6.41	4.13
LOAF_VOL	201.67	14.75	183.00	221.00	217.47	7.31

VARIETY=ND681

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.60	2.01	57.10	61.80	4.05	3.38
K_WT	33.63	3.75	28.70	39.20	14.09	11.16
LG	57.00	15.30	31.00	76.00	234.00	26.84
SM	1.00	1.10	0.00	3.00	1.20	109.54
WHT_ASH	1.75	0.14	1.61	1.99	0.02	7.91
WHT_PRO	14.93	1.52	13.00	16.90	2.31	10.18
HARD	73.33	4.37	68.00	81.00	19.07	5.95
EXTR	65.55	2.78	61.40	69.90	7.71	4.24
FL_ASH	0.41	0.05	0.36	0.48	0.00	11.43
FL_PRO	14.13	1.54	12.00	15.90	2.38	10.91
MIXO	3.83	0.75	3.00	5.00	0.57	19.64
BAKE_ABS	60.13	1.33	58.50	61.40	1.76	2.21
LOAF_VOL	193.50	14.39	173.00	209.00	207.10	7.44

VARIETY=ND682

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.08	2.07	58.70	64.10	4.29	3.39
K WT	31.50	2.72	26.60	33.90	7.39	8.63
LG	43.17	15.97	14.00	57.00	254.97	36.99
SM	2.17	2.14	0.00	5.00	4.57	98.63
WHT ASH	1.71	0.10	1.58	1.88	0.01	5.86
WHT_PRO	14.47	1.58	12.40	16.60	2.50	10.94
HARD	83.50	3.73	78.00	89.00	13.90	4.46
EXTR	64.02	1.92	61.30	66.50	3.70	3.01
FL_ASH	0.44	0.04	0.39	0.51	0.00	9.53
FL_PRO	13.30	1.37	11.60	15.00	1.87	10.28
MIXO	3.67	0.82	3.00	5.00	0.67	22.27
BAKE_ABS	58.78	1.65	55.80	60.50	2.71	2.80
LOAF_VOL	185.67	13.26	168.00	205.00	175.87	7.14

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 29

VARIETY=N86-0348

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.03	2.76	54.60	62.30	7.63	4.76
K_WT	28.18	3.37	23.50	32.20	11.36	11.96
LG	43.00	16.37	20.00	62.00	268.00	38.07
SM	2.50	2.07	0.00	5.00	4.30	82.95
WHT_ASH	1.83	0.15	1.69	2.06	0.02	8.43
WHT_PRO	14.43	1.69	12.50	16.40	2.86	11.71
HARD	70.00	5.14	62.00	77.00	26.40	7.34
EXTR	60.68	3.94	54.30	64.90	15.55	6.50
FL_ASH	0.53	0.06	0.45	0.62	0.00	11.54
FL_PRO	13.57	1.57	11.70	15.20	2.46	11.57
MIXO	3.17	1.33	2.00	5.00	1.77	41.97
BAKE_ABS	58.73	1.83	56.60	60.80	3.35	3.12
LOAF_VOL	194.50	18.83	170.00	218.00	354.70	9.68

VARIETY=N87-0306

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.85	2.51	55.20	62.30	6.29	4.26
K_WT	31.65	3.48	25.60	36.10	12.10	10.99
LG	46.83	18.67	21.00	69.00	348.57	39.86
SM	1.83	2.71	0.00	7.00	7.37	148.05
WHT_ASH	1.73	0.14	1.58	1.96	0.02	8.14
WHT_PRO	14.25	1.57	12.40	16.10	2.45	10.99
HARD	75.17	6.79	66.00	85.00	46.17	9.04
EXTR	65.10	3.46	61.80	70.20	11.98	5.32
FL_ASH	0.47	0.05	0.41	0.54	0.00	9.80
FL_PRO	13.27	1.55	11.40	14.90	2.40	11.67
MIXO	3.67	1.03	2.00	5.00	1.07	28.17
BAKE_ABS	59.67	1.34	57.30	61.40	1.78	2.24
LOAF_VOL	202.17	19.63	172.00	217.00	385.37	9.71

VARIETY=N88-0022

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.20	2.78	54.70	62.60	7.74	4.78
K_WT	31.02	3.81	25.80	36.10	14.49	12.27
LG	55.33	13.66	34.00	75.00	186.67	24.69
SM	1.33	1.21	0.00	3.00	1.47	90.83
WHT_ASH	1.77	0.12	1.60	1.92	0.01	6.53
WHT_PRO	14.52	1.68	12.60	16.90	2.82	11.57
HARD	62.17	2.40	58.00	65.00	5.77	3.86
EXTR	60.68	1.74	59.00	62.80	3.02	2.86
FL_ASH	0.51	0.05	0.43	0.56	0.00	9.51
FL_PRO	13.50	1.39	11.80	15.20	1.92	10.26
MIXO	3.00	1.26	2.00	5.00	1.60	42.16
BAKE_ABS	57.88	1.77	55.50	59.60	3.13	3.06
LOAF_VOL	203.00	20.45	176.00	232.00	418.40	10.08

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 30

VARIETY=N88-3034

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.97	2.84	53.00	59.80	8.09	5.08
K_WT	27.68	3.74	22.60	32.60	13.97	13.50
LG	30.17	17.70	9.00	58.00	313.37	58.68
SM	3.50	2.95	0.00	7.00	8.70	84.27
WHT_ASH	1.91	0.13	1.73	2.10	0.02	6.57
WHT_PRO	15.65	1.34	13.90	17.30	1.78	8.53
HARD	70.67	6.09	62.00	79.00	37.07	8.62
EXTR	62.58	3.12	56.50	65.20	9.71	4.98
FL_ASH	0.48	0.05	0.42	0.55	0.00	10.71
FL_PRO	15.15	1.11	13.80	16.40	1.23	7.32
MIXO	3.67	0.82	3.00	5.00	0.67	22.27
BAKE_ABS	59.93	3.11	56.50	65.40	9.65	5.18
LOAF_VOL	207.83	16.76	185.00	227.00	280.97	8.07

VARIETY=N88-3136

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.70	2.70	55.30	62.10	7.28	4.60
K_WT	28.50	4.05	23.00	32.70	16.43	14.22
LG	43.17	18.04	21.00	64.00	325.37	41.79
SM	3.67	4.97	0.00	13.00	24.67	135.45
WHT_ASH	1.81	0.10	1.68	1.95	0.01	5.32
WHT_PRO	14.88	1.31	13.20	16.40	1.73	8.83
HARD	65.00	8.07	54.00	76.00	65.20	12.42
EXTR	61.73	4.79	52.80	66.80	22.96	7.76
FL_ASH	0.45	0.06	0.38	0.54	0.00	13.50
FL_PRO	14.15	1.12	13.00	15.80	1.26	7.93
MIXO	3.83	0.98	3.00	5.00	0.97	25.65
BAKE_ABS	58.97	2.58	56.20	62.70	6.65	4.37
LOAF_VOL	204.33	15.11	183.00	223.00	228.27	7.39

VARIETY=PH986-61

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	53.27	3.67	48.20	56.40	13.46	6.89
K_WT	25.93	5.05	19.50	32.10	25.55	19.49
LG	16.83	13.67	1.00	36.00	186.97	81.23
SM	12.33	11.60	3.00	30.00	134.67	94.09
WHT_ASH	1.95	0.09	1.82	2.07	0.01	4.78
WHT_PRO	14.30	1.29	12.50	15.60	1.65	8.99
HARD	59.50	3.27	57.00	65.00	10.70	5.50
EXTR	57.22	2.86	53.40	61.70	8.19	5.00
FL_ASH	0.57	0.04	0.50	0.60	0.00	7.20
FL_PRO	13.67	1.05	12.20	15.10	1.11	7.71
MIXO	4.33	1.51	3.00	7.00	2.27	34.74
BAKE_ABS	58.37	1.79	55.80	60.30	3.20	3.07
LOAF_VOL	201.67	13.34	182.00	213.00	177.87	6.61

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 31

VARIETY=SD3056

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.75	2.51	56.80	62.80	6.29	4.20
K_WT	34.20	4.58	27.00	38.90	20.94	13.38
LG	63.33	17.78	29.00	76.00	316.27	28.08
SM	0.83	1.17	0.00	3.00	1.37	140.29
WHT_ASH	1.72	0.13	1.54	1.92	0.02	7.75
WHT_PRO	15.77	1.47	13.70	17.50	2.16	9.32
HARD	88.50	1.87	86.00	91.00	3.50	2.11
EXTR	66.53	1.82	63.80	68.40	3.32	2.74
FL_ASH	0.49	0.06	0.43	0.58	0.00	11.61
FL_PRO	14.08	1.46	12.60	15.90	2.12	10.33
MIXO	3.17	0.75	2.00	4.00	0.57	23.77
BAKE_ABS	60.42	1.60	58.60	63.10	2.57	2.65
LOAF_VOL	199.83	13.35	182.00	217.00	178.17	6.68

VARIETY=SD8070

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.93	2.10	57.70	63.40	4.42	3.51
K_WT	32.58	2.82	28.00	35.80	7.98	8.67
LG	53.83	12.97	33.00	64.00	168.17	24.09
SM	1.67	1.51	0.00	4.00	2.27	90.33
WHT_ASH	1.74	0.14	1.58	1.98	0.02	8.10
WHT_PRO	14.22	1.93	11.80	16.30	3.73	13.59
HARD	79.50	4.55	75.00	86.00	20.70	5.72
EXTR	65.33	2.09	61.60	67.80	4.35	3.19
FL_ASH	0.45	0.05	0.40	0.53	0.00	11.42
FL_PRO	13.05	1.69	10.90	14.70	2.87	12.98
MIXO	3.17	0.98	2.00	5.00	0.97	31.05
BAKE_ABS	57.97	1.06	56.90	59.30	1.11	1.82
LOAF_VOL	193.33	16.22	174.00	213.00	263.07	8.39

VARIETY=SD8072

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.15	2.40	57.60	63.90	5.77	4.00
K_WT	33.33	4.24	27.30	37.60	17.95	12.71
LG	60.00	17.96	31.00	77.00	322.40	29.93
SM	1.50	0.84	0.00	2.00	0.70	55.78
WHT_ASH	1.78	0.17	1.63	2.07	0.03	9.73
WHT_PRO	14.70	2.05	12.40	17.50	4.22	13.97
HARD	81.33	1.97	79.00	84.00	3.87	2.42
EXTR	66.55	1.86	64.30	68.40	3.47	2.80
FL_ASH	0.49	0.06	0.42	0.58	0.00	12.04
FL_PRO	13.87	2.04	11.70	16.50	4.15	14.70
MIXO	3.33	1.03	2.00	5.00	1.07	30.98
BAKE_ABS	59.03	0.94	57.80	60.00	0.89	1.60
LOAF_VOL	184.17	13.48	169.00	203.00	181.77	7.32

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 32

VARIETY=SD8073

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.70	2.56	55.80	62.60	6.54	4.28
K_WT	33.40	3.32	28.10	36.60	11.01	9.93
LG	64.00	10.89	52.00	76.00	118.50	17.01
SM	0.60	0.55	0.00	1.00	0.30	91.29
WHT_ASH	1.77	0.19	1.58	2.08	0.04	10.85
WHT_PRO	14.20	2.27	11.90	17.30	5.16	16.00
HARD	80.60	4.93	77.00	89.00	24.30	6.12
EXTR	64.64	2.55	60.80	67.60	6.49	3.94
FL_ASH	0.51	0.07	0.44	0.62	0.01	14.22
FL_PRO	13.18	2.10	11.20	16.10	4.39	15.90
MIXO	4.60	2.19	3.00	7.00	4.80	47.63
BAKE ABS	58.60	1.37	57.30	60.50	1.87	2.33
LOAF VOL	173.60	13.52	160.00	192.00	182.80	7.79

VARIETY=SD8074

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.46	2.01	56.30	61.60	4.04	3.44
K_WT	29.97	2.60	26.50	33.40	6.77	8.68
LG	48.86	16.71	25.00	69.00	279.14	34.20
SM	2.14	2.19	0.00	6.00	4.81	102.34
WHT_ASH	1.72	0.14	1.57	2.00	0.02	8.11
WHT_PRO	14.59	1.64	12.30	17.00	2.67	11.21
HARD	77.29	3.64	74.00	85.00	13.24	4.71
EXTR	64.09	1.90	60.30	66.20	3.60	2.96
FL_ASH	0.48	0.04	0.42	0.54	0.00	8.75
FL_PRO	13.79	1.67	11.60	15.90	2.78	12.09
MIXO	4.86	1.86	3.00	8.00	3.48	38.39
BAKE_ABS	58.71	1.69	55.80	60.50	2.87	2.89
LOAF_VOL	187.00	18.22	160.00	211.00	332.00	9.74

VARIETY=STOA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.83	2.92	53.90	61.20	8.51	5.05
K WT	28.12	3.91	22.10	32.70	15.31	13.92
LG	36.50	15.41	7.00	53.00	237.50	42.22
SM	3.33	2.73	1.00	8.00	7.47	81.98
WHT_ASH	1.81	0.16	1.65	2.08	0.02	8.62
WHT_PRO	14.78	1.56	12.80	17.00	2.43	10.54
HARD	75.50	3.27	71.00	79.00	10.70	4.33
EXTR	56.05	19.97	15.70	68.20	398.89	35.63
FL_ASH	0.47	0.06	0.40	0.57	0.00	13.67
FL_PRO	13.92	1.44	12.20	15.80	2.07	10.34
MIXO	4.00	0.63	3.00	5.00	0.40	15.81
BAKE_ABS	60.52	1.58	58.50	63.10	2.50	2.61
LOAF_VOL	192.67	14.88	172.00	213.00	221.47	7.72

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 33

VARIETY=TR983-239

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.37	2.05	54.90	60.20	4.19	3.51
K_WT	34.72	3.63	28.20	39.20	13.16	10.45
LG	46.17	15.43	17.00	60.00	238.17	33.43
SM	2.33	2.50	0.00	7.00	6.27	107.29
WHT_ASH	1.83	0.13	1.63	2.03	0.02	7.18
WHT_PRO	14.48	1.33	13.00	15.90	1.77	9.20
HARD	68.33	5.92	61.00	75.00	35.07	8.67
EXTR	59.88	3.00	56.30	64.40	9.01	5.01
FL_ASH	0.55	0.06	0.46	0.62	0.00	11.05
FL_PRO	13.62	1.25	12.30	15.10	1.56	9.18
MIXO	4.17	1.60	2.00	7.00	2.57	38.45
BAKE_ABS	59.93	1.38	57.30	61.40	1.90	2.30
LOAF_VOL	195.33	11.98	177.00	209.00	143.47	6.13

VARIETY=XW397A3

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.27	2.26	55.80	62.20	5.09	3.87
K_WT	29.88	3.27	25.60	35.50	10.71	10.95
LG	42.67	16.77	20.00	69.00	281.07	39.29
SM	4.50	5.01	0.00	14.00	25.10	111.33
WHT_ASH	1.80	0.11	1.66	1.99	0.01	6.36
WHT_PRO	14.65	1.65	12.50	16.80	2.72	11.26
HARD	93.00	4.15	90.00	101.00	17.20	4.46
EXTR	66.07	1.84	63.00	68.30	3.40	2.79
FL_ASH	0.55	0.06	0.49	0.66	0.00	10.85
FL_PRO	13.40	1.54	11.40	15.20	2.37	11.49
MIXO	3.83	0.75	3.00	5.00	0.57	19.64
BAKE_ABS	60.20	1.41	58.60	62.70	2.00	2.35
LOAF_VOL	195.83	14.58	177.00	215.00	212.57	7.44

VARIETY=XW398A4

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.25	2.73	55.70	62.50	7.46	4.69
K_WT	31.85	3.52	27.90	38.00	12.41	11.06
LG	44.67	18.57	23.00	72.00	344.67	41.56
SM	2.50	2.07	0.00	6.00	4.30	82.95
WHT_ASH	1.86	0.20	1.62	2.15	0.04	10.93
WHT_PRO	14.25	1.51	12.40	16.20	2.28	10.59
HARD	71.00	8.46	59.00	81.00	71.60	11.92
EXTR	62.12	4.66	54.60	68.30	21.68	7.50
FL_ASH	0.57	0.09	0.47	0.68	0.01	15.97
FL_PRO	13.62	1.41	11.80	15.60	1.99	10.37
MIXO	4.50	1.38	3.00	7.00	1.90	30.63
BAKE_ABS	59.70	2.42	57.30	63.70	5.86	4.05
LOAF_VOL	208.67	19.59	181.00	226.00	383.87	9.39

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=WILLISTON NURSERY=UNIFORM

TABLE 34

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		58.6	31.7	37	1	1.28	14.2	69	4	66.3	0.41	13.2	5	4	56.2	3
CHRIS		59.1	27.5	24	2	1.35	14.7	74	4	64.9	0.40	14.0	5	3	56.2	3
ERA	S	58.8	28.9	30	3	1.30	13.0	65	3	68.5	0.40	11.7	5	2	53.8	2
STOA	S	57.4	29.7	33	1	1.30	14.9	70	4	66.6	0.39	14.1	5	4	59.3	4
BUTTE 86	S	57.7	32.6	54	2	1.29	15.4	76	4	67.3	0.39	14.7	5	4	60.3	4
SD3056		58.4	37.0	68	1	1.38	15.2	85	4	68.2	0.43	14.5	5	4	61.8	3
SD8072		59.0	32.8	58	1	1.22	14.6	71	4	68.9	0.39	13.9	5	4	59.0	3
SD8073		59.0	31.3	50	1	1.27	14.5	67	4	65.8	0.42	13.6	5	4	59.0	4
SD8074		58.0	30.1	42	2	1.31	15.1	67	4	65.6	0.41	14.6	5	4	60.3	5
SD8070		59.2	32.3	48	1	1.24	14.5	73	4	67.8	0.37	13.5	5	4	59.0	3
MN88334		59.8	30.3	31	1	1.22	13.9	70	3	66.7	0.34	12.7	5	3	56.5	2
MN88076		59.4	33.8	68	1	1.31	14.9	74	4	69.0	0.36	13.7	5	4	59.6	4
MN88415		59.5	35.7	49	1	1.27	14.5	73	4	67.9	0.37	13.7	5	4	58.6	3
MN89028		58.7	36.4	61	1	1.30	15.3	69	4	66.8	0.38	14.7	5	4	60.8	3
MN89408		58.7	31.2	39	3	1.22	13.6	79	3	67.2	0.44	12.1	5	2	54.3	3
ND671		60.2	33.9	59	1	1.30	15.7	71	4	66.8	0.33	15.3	5	4	61.4	4
ND673		59.5	33.0	52	2	1.27	14.6	64	4	68.2	0.35	13.8	5	4	58.2	4
ND675		60.1	35.1	66	1	1.35	15.6	78	4	67.5	0.42	14.8	5	4	61.4	5
ND681		57.6	33.9	50	2	1.35	15.3	69	4	65.3	0.38	14.7	5	3	60.8	4
ND682		61.0	34.6	41	2	1.30	14.6	75	4	67.2	0.36	13.6	5	4	59.6	4
XW398A4		59.8	37.2	61	0	1.33	14.0	58	4	66.7	0.41	13.1	5	4	57.6	3
XW397A3		58.9	34.2	53	2	1.30	14.5	97	4	69.5	0.41	13.2	5	4	58.2	3
N87-0306		57.8	32.5	52	2	1.25	14.4	60	4	66.8	0.39	13.6	5	4	59.6	4
N88-0022		59.4	37.9	78	0	1.24	14.2	66	4	67.0	0.36	13.3	5	4	56.9	2
N88-3136		59.1	31.0	48	1	1.32	14.6	64	4	66.3	0.38	13.8	5	4	59.6	4
N88-3034		57.4	29.7	39	1	1.32	15.4	69	4	67.5	0.40	14.8	5	4	61.4	2
N86-0348		57.4	30.9	49	2	1.32	14.2	59	4	62.9	0.44	13.2	5	2	60.8	4
MT8849		58.1	31.7	40	1	1.32	13.6	67	3	65.5	0.41	12.5	5	3	57.6	4
BW148		58.1	30.1	42	2	1.37	15.5	71	4	67.3	0.42	14.7	5	4	61.4	4
BW150		58.6	29.8	38	1	1.26	14.4	75	4	68.5	0.34	13.5	5	4	57.6	3
BW152		59.0	30.9	39	1	1.24	14.9	76	4	67.8	0.36	13.9	5	4	56.2	3
PH986-61		58.0	40.0	66	2	1.34	14.3	50	4	60.4	0.42	13.9	5	2	59.3	4
TR983-239		59.5	41.5	71	1	1.39	14.3	50	4	64.5	0.41	13.4	5	3	60.5	3
AMIDON		58.5	31.9	47	2	1.23	14.5	79	4	67.8	0.44	13.3	5	4	58.6	4
GRANDIN		59.4	36.6	72	2	1.29	14.9	71	4	67.3	0.42	13.8	5	4	58.6	4
NORDIC		60.4	37.2	55	1	1.46	13.6	52	3	66.3	0.47	12.6	5	3	57.6	3

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=WILLISTON NURSERY=UNIFORM

TABLE 34 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		56.2	3.25	9	8.5	8.0	188	2	3.3										MJ					
CHRIS		56.2	3.25	9	8.5	8.0	181	2	3.0			MI		MI					MJ					
ERA	S	53.8	4.00	9	8.0	8.0	195	2	2.3				MI			MJ		MI	MJ					
STOA	S	59.3	3.50	9	8.5	7.5	194	2	3.3	MI									MJ					MI
BUTTE 86	S	60.3	2.75	9	8.0	8.0	204	1	3.0	MI									MJ	MI				
SD3056		61.8	3.00	9	8.0	8.0	216	3	3.7										MI					
SD8072		59.0	3.25	9	8.0	7.5	191	2	3.3										MJ					MI
SD8073		59.0	3.50	9	8.0	8.0	188	2	3.3										MJ					
SD8074		62.3	3.75	9	7.0	8.0	203	4	4.0													MI		
SD8070		59.0	3.25	9	7.5	8.0	224	2	3.3										MJ			MI		
MN88334		56.5	2.50	9	7.5	8.0	189	1	2.3				MI			MI		MI	MJ	MI		MI		
MN88076		61.6	3.00	9	7.5	7.5	206	3	3.7										MI			MI	MI	
MN88415		58.6	3.00	9	8.0	7.5	205	2	3.3										MJ					MI
MN89028		60.8	2.25	9	8.0	8.0	206	2	3.3										MI	MI				
MN89408		54.3	4.25	9	7.5	8.0	193	2	2.3				MI			MJ			MJ			MI		
ND671		61.4	2.50	9	8.0	7.5	207	2	3.3										MI	MI				MI
ND673		58.2	4.25	9	8.5	7.5	194	2	3.3										MJ					MI
ND675		61.4	4.00	9	7.5	7.5	211	3	3.7										MI			MI	MI	
ND681		60.8	2.75	9	8.0	8.0	204	2	3.0	MI				MI					MI	MI				
ND682		59.6	3.50	9	8.0	8.0	180	2	3.3										MJ					
XW398A4		57.6	4.50	9	8.0	8.0	194	2	3.3										MJ					
XW397A3		58.2	3.50	9	8.0	7.5	192	2	3.3										MJ					MI
N87-0306		59.6	3.75	9	8.0	7.5	206	2	3.3	MI									MJ					MI
N88-0022		56.9	2.50	9	8.5	7.5	203	1	3.0									MI	MJ	MI				MI
N88-3136		59.6	3.50	9	8.0	7.5	192	2	3.3										MJ					MI
N88-3034		61.4	2.25	9	8.0	8.0	204	2	3.3	MI								MI	MI	MI				
N86-0348		60.8	3.25	9	7.5	8.0	209	3	3.0	MI				MJ					MI			MI		
MT8849		57.6	6.75	9	8.0	8.0	194	1	2.3				MI			MI			MJ	MI				
BW148		61.4	2.75	9	8.0	8.0	185	2	3.3										MI	MI				
BW150		59.6	3.75	9	7.5	8.0	199	2	3.3										MJ			MI		
BW152		56.2	3.00	9	8.5	8.0	195	2	3.3										MJ					
PH986-61		59.3	4.75	9	8.5	7.5	203	2	2.7					MJ					MJ					MI
TR983-239		60.5	3.00	9	8.5	7.5	202	3	3.3					MI					MI					MI
AMIDON		58.6	3.00	7	7.5	8.5	195	2	3.3										MJ			MI		
GRANDIN		58.6	3.75	9	8.5	7.5	198	2	3.3										MJ					MI
NORDIC		57.6	3.50	7	8.5	8.0	179	2	2.7				MI			MI			MJ					

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	28.3	8	13.9	65.4	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	7.5	7.5	177
MAJOR FAULTING VALUES	56.9	25.3	18	12.9	63.4	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	5.0	5.0	167

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=DICKINSON NURSERY=UNIFORM

TABLE 35

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		63.5	33.7	58	0	1.46	14.4	90	3	68.3	0.45	13.9	5	3	58.6	2
CHRIS		63.5	34.1	61	0	1.48	16.4	94	4	68.8	0.39	16.0	5	3	62.7	3
ERA	S	63.7	36.6	64	0	1.50	14.9	96	4	71.7	0.38	13.8	5	4	60.8	2
STOA	S	63.7	37.7	66	0	1.42	15.4	98	4	71.4	0.35	14.9	5	4	61.1	3
BUTTE 86	S	63.8	42.6	84	0	1.50	16.2	100	4	70.4	0.37	15.8	5	4	61.4	3
SD 3056		63.8	42.6	85	0	1.41	16.0	103	4	69.6	0.41	15.4	5	4	61.1	3
SD 8072		64.9	40.3	83	0	1.58	16.1	104	4	72.1	0.39	15.5	5	4	60.5	2
SD 8073		64.6	41.5	80	0	1.44	15.5	95	4	70.4	0.39	14.6	5	4	66.1	3
SD 8074		63.2	35.1	65	0	1.47	15.5	102	4	68.1	0.42	15.0	5	3	66.1	5
SD 8070		64.2	39.7	76	0	1.43	15.3	98	4	70.4	0.34	14.6	5	4	63.4	4
MN 88334		63.3	34.2	55	0	1.37	14.6	79	4	69.6	0.35	14.0	5	4	60.0	2
MN 88076		63.6	40.3	83	0	1.43	15.3	105	4	70.2	0.36	14.2	5	4	61.8	3
MN 88415		63.4	39.2	67	0	1.50	14.8	89	4	69.6	0.39	14.2	5	4	60.3	3
MN 89028		63.4	41.8	77	0	1.47	15.5	94	4	69.4	0.38	14.7	5	4	61.8	2
MN 89408		64.1	39.5	68	0	1.38	14.2	105	4	69.8	0.40	13.1	5	4	60.0	3
ND 671		64.1	37.7	73	0	1.50	16.7	105	4	69.3	0.35	16.4	5	4	62.7	4
ND 673		64.6	43.3	80	0	1.53	16.1	92	4	71.2	0.37	15.8	5	4	62.5	4
ND 675		65.1	41.7	85	0	1.51	16.8	107	4	72.1	0.39	16.7	5	4	64.0	5
ND 681		63.3	39.4	72	0	1.48	15.9	85	4	70.0	0.36	15.8	5	4	62.5	4
ND 682		64.5	40.0	68	0	1.54	15.6	97	4	68.9	0.39	15.0	5	3	63.4	3
XW 398A4		64.2	43.5	79	0	1.43	15.3	84	4	69.3	0.43	15.1	5	4	62.1	4
XW 397A3		63.3	42.9	81	0	1.52	16.4	116	4	71.4	0.41	15.3	5	4	62.7	3
N87-0306		64.5	41.8	82	0	1.48	14.9	107	4	71.6	0.36	14.2	5	4	62.1	3
N88-0022		64.0	42.7	83	0	1.42	14.5	90	4	70.1	0.37	13.6	5	4	61.4	3
N88-3136		64.4	38.9	72	0	1.53	15.5	94	4	70.6	0.39	15.3	5	4	61.1	3
N88-3034		62.1	34.1	52	0	1.66	16.5	94	4	68.9	0.40	16.1	5	3	60.8	3
N86-0348		63.8	39.8	74	0	1.51	14.9	79	4	67.8	0.39	14.1	5	3	61.8	4
MT 8849		63.8	40.8	70	0	1.49	14.9	96	4	68.3	0.39	14.6	5	3	59.3	4
BW 148		63.4	37.5	72	0	1.62	17.2	100	4	69.8	0.41	16.5	5	4	62.1	3
BW 150		62.7	37.5	59	1	1.51	16.7	108	4	68.4	0.37	15.9	5	3	60.8	3
BW 152		63.4	37.3	65	0	1.51	16.8	100	4	68.9	0.38	16.2	5	3	60.0	2
PH 986-61		63.3	49.3	91	0	1.44	15.1	83	4	65.5	0.38	14.8	5	2	60.0	4
TR 983-239		63.9	51.0	84	0	1.50	15.3	97	4	66.3	0.44	14.2	5	2	63.7	4

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=DICKINSON NURSERY=UNIFORM

TABLE 35 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		58.6	2.75	7	9.0	8.0	194	1	2.3		MJ			MI				MI	MJ	MI				
CHRIS		62.7	2.00	9	8.5	7.5	191	3	3.3		MI			MI						MI				MI
ERA	S	62.8	3.50	9	8.5	8.0	193	4	4.0		MI							MI						
STOA	S	61.1	3.00	9	8.0	8.5	194	3	3.7										MI					
BUTTE 86	S	61.4	2.00	7	8.0	8.0	192	2	3.3										MI	MI				
SD 3056		61.1	2.50	9	8.5	8.5	203	2	3.3										MI	MI				
SD 8072		60.5	2.25	7	8.0	8.0	184	2	3.3									MI	MI	MI				
SD 8073		61.1	2.50	7	8.0	8.0	191	2	3.3										MI	MI				
SD 8074		61.1	3.50	9	8.0	8.0	197	3	3.3		MI			MI					MI					
SD 8070		63.4	2.75	9	8.0	7.5	208	3	3.7											MI				MI
MN 88334		60.0	2.25	7	8.0	8.0	192	1	3.0		MI							MI	MJ	MI				
MN 88076		61.8	2.75	9	8.5	8.0	200	2	3.3										MI	MI				
MN 88415		60.3	2.75	7	9.0	8.0	191	1	3.0										MJ	MI				
MN 89028		61.8	2.00	7	8.0	8.5	207	2	3.3									MI	MI	MI				
MN 89408		60.0	3.00	7	8.0	8.0	190	2	3.3										MJ					
ND 671		62.7	3.00	9	9.0	7.5	204	4	4.0															MI
ND 673		62.5	3.00	9	8.0	8.5	199	4	4.0															
ND 675		64.0	3.25	9	8.5	7.5	205	4	4.0															MI
ND 681		62.5	2.75	9	8.5	7.5	213	3	3.7											MI				MI
ND 682		65.4	2.25	7	8.5	8.0	190	3	3.3					MI						MI				
XW 398A4		62.1	4.00	9	9.0	8.0	214	4	4.0															
XW 397A3		62.7	2.25	9	8.5	8.0	200	3	3.7											MI				
N87-0306		62.1	3.25	9	8.5	8.0	201	4	4.0															
N88-0022		61.4	2.50	9	9.0	8.0	197	2	3.3										MI	MI				
N88-3136		61.1	2.75	9	8.5	8.0	203	2	3.3										MI	MI				
N88-3034		60.8	2.25	9	8.0	8.0	211	2	3.0		MI			MI					MI	MI				
N86-0348		63.8	5.25	9	8.5	8.0	207	4	3.7					MI										
MT 8849		59.3	2.50	7	8.5	8.5	185	1	2.7					MI					MJ	MI				
BW 148		62.1	2.00	9	8.0	8.0	190	3	3.7											MI				
BW 150		60.8	2.00	9	8.0	8.0	207	2	3.0					MI					MI	MI				
BW 152		60.0	1.75	7	8.0	8.0	201	1	2.7					MI				MI	MJ	MJ				
PH 986-61		62.0	4.00	9	9.0	7.5	213	4	3.3					MJ										MI
TR 983-239		63.7	2.75	9	8.0	8.0	194	3	3.0					MJ						MI				

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	36.9	8	13.9	69.1	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	7.5	7.5	172
MAJOR FAULTING VALUES	56.9	33.9	18	12.9	67.1	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	5.0	5.0	162

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=WYOMING STATION=POWELL NURSERY=UNIFORM

TABLE 36

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		62.6	37.5	77	0	1.67	10.9	73	2	66.2	0.55	10.1	5	2	51.0	0
CHRIS		63.0	31.7	57	0	1.64	11.4	76	2	64.8	0.49	11.1	5	2	55.8	1
ERA	S	63.1	32.3	60	1	1.63	10.1	78	2	65.0	0.51	9.1	5	2	50.7	0
STOA	S	63.0	34.6	64	0	1.65	10.3	76	2	66.0	0.41	9.4	5	2	52.9	1
BUTTE 86	S	62.8	38.5	78	0	1.68	10.2	72	2	64.5	0.48	8.7	5	2	52.9	1
SD3056		61.9	40.2	87	0	1.66	11.1	84	2	65.8	0.51	10.2	5	2	53.8	1
SD8072		63.0	37.5	78	0	1.66	9.7	76	2	66.8	0.46	8.5	5	2	51.0	1
SD8073		62.4	37.3	78	0	1.68	9.8	72	2	65.5	0.50	8.7	5	2	52.6	1
SD8074		62.1	34.5	72	0	1.69	9.8	70	2	64.6	0.49	8.4	5	2	50.1	1
SD8070		63.0	36.8	70	0	1.68	9.5	74	2	64.3	0.49	7.9	5	2	50.7	1
MN88334		62.2	33.3	60	0	1.57	10.5	64	2	66.9	0.45	9.6	5	2	52.9	1
MN88076		62.8	37.6	80	0	1.62	10.4	75	2	66.3	0.49	9.3	5	2	54.6	1
MN88415		63.8	39.8	68	0	1.67	10.5	75	2	65.6	0.52	9.7	5	2	54.3	1
MN89028		64.0	36.9	76	0	1.61	11.1	77	2	65.5	0.46	10.4	5	2	55.5	1
MN89408		63.0	37.5	73	0	1.62	10.1	75	2	65.1	0.44	9.1	5	2	52.6	1
ND671		61.1	35.8	70	1	1.63	9.8	74	2	64.0	0.57	8.1	5	2	50.4	1
ND673		63.9	37.2	74	0	1.67	10.2	71	2	65.3	0.42	9.4	5	2	54.3	2
ND675		63.4	39.7	79	0	1.68	10.5	67	2	67.2	0.45	9.4	5	2	53.2	1
ND681		62.4	40.0	73	0	1.69	10.8	69	2	65.5	0.47	9.9	5	2	53.8	2
ND682		63.8	37.5	65	0	1.64	10.9	76	2	64.3	0.45	9.7	5	2	54.3	1
XW398A4		62.9	43.5	85	0	1.66	10.5	61	2	66.2	0.54	9.8	5	2	52.2	1
XW397A3		62.8	37.5	74	0	1.62	10.2	91	2	66.3	0.55	8.4	5	2	52.2	1
N87-0306		62.8	40.3	77	0	1.66	10.8	69	2	67.3	0.47	9.7	5	2	53.8	1
N88-0022		63.3	40.2	81	0	1.63	11.0	73	2	65.5	0.47	9.9	5	2	51.9	1
N88-3136		62.6	34.0	66	1	1.71	11.2	67	2	67.3	0.46	11.0	5	2	52.2	1
N88-3034		62.6	33.7	60	0	1.70	10.5	74	2	67.0	0.46	10.1	5	2	52.6	1
N86-0348		62.8	36.8	73	0	1.71	10.4	72	2	65.5	0.53	9.0	5	2	51.6	0
MT8849		63.0	40.8	77	0	1.68	10.7	69	2	64.7	0.49	9.0	5	2	55.0	2
BW148		63.1	34.5	68	0	1.69	11.2	79	2	68.6	0.51	10.5	5	2	55.8	1
BW150		62.8	34.7	60	0	1.65	11.8	75	2	66.0	0.52	11.0	5	2	56.5	1
BW152		63.1	34.1	64	0	1.64	11.2	74	2	66.5	0.50	10.2	5	2	52.9	1
PH986-61		61.4	36.8	71	0	1.69	11.3	65	2	67.5	0.48	10.5	5	2	56.2	2
TR983-239		63.4	46.7	83	0	1.68	10.6	78	2	65.0	0.55	9.4	5	2	54.6	1

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=WYOMING STATION=POWELL NURSERY=UNIFORM

TABLE 36 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		.	.	.	.	.	.	.	.				MJ			MJ								
CHRIS		.	.	.	.	.	.	.	.		MI		MJ			MJ		MJ						
ERA	S	.	.	.	.	.	.	.	.		MI		MJ			MJ								
STOA	S	.	.	.	.	.	.	.	.				MJ			MJ		MJ						
BUTTE 86	S	.	.	.	.	.	.	.	.				MJ			MJ		MJ						
SD3056		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
SD8072		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
SD8073		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
SD8074		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
SD8070		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
MN88334		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
MN88076		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
MN88415		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
MN89028		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
MN89408		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
ND671		.	.	.	.	.	.	.	.				MJ		MI	MJ		MJ						
ND673		.	.	.	.	.	.	.	.				MJ			MJ		MI						
ND675		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
ND681		.	.	.	.	.	.	.	.				MJ			MJ		MI						
ND682		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
XW398A4		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
XW397A3		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
N87-0306		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
N88-0022		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
N88-3136		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
N88-3034		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
N86-0348		.	.	.	.	.	.	.	.				MJ			MJ								
MT8849		.	.	.	.	.	.	.	.				MJ			MJ		MI						
BW148		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
BW150		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
BW152		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
PH986-61		.	.	.	.	.	.	.	.				MJ			MJ		MI						
TR983-239		.	.	.	.	.	.	.	.				MJ			MJ		MJ						

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	33.0	8	13.9	63.1	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	7.5	7.5	.
MAJOR FAULTING VALUES	56.9	30.0	18	12.9	61.1	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	5.0	5.0	.

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=MONTANA STATION=SIDNEY NURSERY=UNIFORM

TABLE 37

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		63.3	37.7	73	0	1.53	14.0	86	4	65.7	0.47	13.6	5	3	60.3	3
CHRIS		61.9	50.8	84	0	1.31	11.6	76	2	66.2	0.42	10.9	5	1	57.3	2
ERA	S	63.5	36.5	70	1	1.47	12.4	94	2	67.6	0.41	11.7	5	2	56.2	2
STOA	S	62.0	38.2	73	0	1.52	14.1	91	4	69.2	0.37	13.8	5	4	60.3	3
BUTTE 86	S	63.3	43.1	85	0	1.52	15.3	96	4	69.3	0.38	15.0	5	4	60.3	2
SD 3056		62.3	35.8	73	0	1.50	14.4	89	4	66.6	0.40	14.6	5	4	60.0	3
SD 8072		63.2	42.9	84	0	1.61	15.5	93	4	68.8	0.41	15.0	5	4	62.5	3
SD 8073		63.4	43.7	88	0	1.51	14.6	94	4	68.6	0.42	14.5	5	4	63.4	3
SD 8074		63.0	38.9	78	0	1.57	15.1	88	4	66.5	0.40	14.7	5	3	62.1	3
SD 8070		63.7	39.5	78	0	1.55	15.2	100	4	69.3	0.37	15.0	5	4	61.1	3
MN 88334		62.2	35.7	68	0	1.40	13.9	82	3	69.4	0.39	13.4	5	4	57.3	2
MN 88076		63.0	41.0	88	0	1.60	14.2	93	4	68.1	0.41	13.6	5	4	60.5	3
MN 88415		63.2	42.4	79	0	1.59	14.6	92	4	67.1	0.42	14.4	5	4	59.3	3
MN 89028		62.7	45.2	86	0	1.48	15.3	86	4	65.8	0.39	15.2	5	3	60.5	2
MN 89408		63.1	39.8	73	0	1.48	13.6	98	3	68.3	0.44	12.7	5	3	60.5	3
ND 671		63.0	37.7	74	0	1.64	15.8	96	4	67.6	0.39	15.8	5	4	64.4	3
ND 673		63.8	44.1	85	0	1.49	15.3	89	4	68.3	0.39	15.1	5	4	64.0	4
ND 675		64.5	45.0	88	0	1.62	16.0	98	4	68.1	0.43	15.8	5	4	65.1	4
ND 681		63.0	42.2	79	0	1.63	16.5	90	4	66.1	0.39	16.4	5	3	67.7	4
ND 682		64.0	40.8	75	0	1.51	15.5	93	4	65.6	0.42	15.1	5	3	67.1	3
XW 398A4		63.1	45.2	85	0	1.63	14.6	85	4	66.3	0.43	14.5	5	3	63.4	4
XW 397A3		63.4	42.2	86	0	1.56	15.0	111	4	69.5	0.46	14.3	5	4	61.4	3
N87-0306		63.7	42.7	84	0	1.54	13.6	84	3	68.6	0.40	13.3	5	4	60.0	3
N88-0022		63.7	45.2	89	0	1.45	14.5	83	4	66.3	0.40	14.2	5	3	61.4	3
N88-3136		63.0	38.6	80	0	1.56	15.2	87	4	67.4	0.43	15.0	5	4	61.4	3
N88-3034		60.6	36.4	68	0	1.70	15.7	85	4	68.3	0.43	15.6	5	4	59.3	2
N86-0348		62.4	40.5	82	0	1.50	14.9	80	4	67.3	0.42	14.7	5	4	60.8	3
MT 8849		62.7	42.7	82	0	1.57	13.8	100	3	68.1	0.40	13.4	5	4	61.8	5
BW 148		62.4	37.6	76	0	1.65	16.3	95	4	67.8	0.44	16.4	5	4	64.0	3
BW 150		62.7	37.6	75	0	1.65	15.0	93	4	67.0	0.40	14.7	5	4	61.8	3
BW 152		62.6	39.4	74	0	1.56	15.8	104	4	68.3	0.39	15.7	5	4	60.3	3
PH 986-61		63.8	53.2	94	0	1.54	15.2	80	4	61.9	0.42	15.3	5	2	63.1	4
TR 983-239		64.3	54.3	94	0	1.60	14.8	78	4	66.5	0.43	14.4	5	3	63.4	3

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=MONTANA STATION=SIDNEY NURSERY=UNIFORM

TABLE 37 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		60.3	2.75	9	8.0	8.0	202	1	2.7					MI					MJ	MI				
CHRIS		57.3	2.25	5	8.5	9.0	182	1	1.3				MJ	MI		MJ		MI	MJ	MI	MI			
ERA	S	56.2	3.50	5	8.0	8.0	184	2	2.0		MI		MJ			MJ		MI	MJ		MI			
STOA	S	60.3	2.75	5	8.5	8.0	189	1	3.0										MJ	MI	MI			
BUTTE 86	S	60.3	2.00	7	8.0	8.0	190	1	3.0									MI	MJ	MI				
SD 3056		60.0	2.50	9	8.0	8.0	200	1	3.0		MI								MJ	MI				
SD 8072		62.5	2.25	7	8.0	8.0	191	3	3.7											MI				
SD 8073		63.4	2.25	7	8.0	8.5	195	3	3.7											MI				
SD 8074		62.1	2.50	9	8.0	8.5	197	3	3.3					MI						MI				
SD 8070		63.1	2.50	9	8.5	7.5	206	3	3.7											MI				MI
MN 88334		57.3	1.75	5	8.0	7.0	182	1	2.7		MI		MI					MI	MJ	MJ	MI			MI
MN 88076		60.5	2.50	9	8.0	8.0	194	2	3.3										MI	MI				
MN 88415		59.3	2.75	5	9.0	8.0	184	1	3.0										MJ	MI	MI			
MN 89028		60.5	2.00	9	8.0	8.0	212	2	3.0					MI				MI	MI	MI				
MN 89408		62.5	2.75	7	8.0	8.0	193	3	3.0				MI			MI				MI				
ND 671		64.4	2.25	9	8.5	7.5	205	3	3.7											MI				MI
ND 673		64.0	3.50	9	8.0	7.5	202	4	4.0															MI
ND 675		65.1	2.75	9	8.5	8.0	208	3	3.7											MI				
ND 681		67.7	2.50	9	8.0	7.0	228	3	3.3					MI						MI				MI
ND 682		67.1	2.25	7	8.0	9.0	213	3	3.3					MI						MI				
XW 398A4		63.4	3.25	9	8.0	8.0	213	4	3.7					MI										
XW 397A3		61.4	2.25	9	8.0	7.0	197	2	3.3										MI	MI				MI
N87-0306		62.0	3.00	9	8.0	9.0	193	4	3.7				MI											
N88-0022		61.4	2.50	9	8.5	7.5	202	2	3.0					MI					MI	MI				MI
N88-3136		61.4	2.25	9	8.0	8.0	207	2	3.3										MI	MI				
N88-3034		59.3	2.00	9	8.0	8.0	205	1	3.0		MI							MI	MJ	MI				
N86-0348		60.8	2.25	7	8.0	9.0	192	2	3.3										MI	MI				
MT 8849		61.8	4.25	7	8.0	7.5	190	3	3.3				MI						MI					MI
BW 148		64.0	1.75	7	8.5	7.5	191	2	3.3											MJ				MI
BW 150		61.8	2.25	9	8.5	8.0	203	2	3.3										MI	MI				
BW 152		60.3	1.75	9	8.0	8.0	197	1	3.0										MJ	MJ				
PH 986-61		63.1	3.25	9	8.0	7.0	219	4	3.3					MJ										MI
TR 983-239		63.4	2.25	5	8.5	9.0	208	3	3.3					MI						MI	MI			

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)	DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	37.2	8	13.9	66.6	.57	12.9	3	2,7,8	61.9	5.75-8.00 2.00-2.75	6	7.5	7.5	167
MAJOR FAULTING VALUES	56.9	34.2	18	12.9	64.6	.61	12.4	2	1,9-11	60.4	UNDER 1.75 OVER 8.00	4	5.0	5.0	157

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 38

VARIETY=BUTTE 86

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.60	3.39	57.70	63.80	11.47	5.50
K_WT	39.43	5.92	32.60	43.10	35.08	15.02
LG	74.33	17.62	54.00	85.00	310.33	23.70
SM	0.67	1.15	0.00	2.00	1.33	173.21
WHT_ASH	1.44	0.13	1.29	1.52	0.02	8.87
WHT_PRO	15.63	0.49	15.30	16.20	0.24	3.16
HARD	90.67	12.86	76.00	100.00	165.33	14.18
EXTR	69.00	1.57	67.30	70.40	2.47	2.28
FL_ASH	0.38	0.01	0.37	0.39	0.00	2.63
FL_PRO	15.17	0.57	14.70	15.80	0.32	3.75
MIXO	3.00	1.00	2.00	4.00	1.00	33.33
BAKE_ABS	60.67	0.64	60.30	61.40	0.40	1.05
LOAF_VOL	195.33	7.57	190.00	204.00	57.33	3.88

VARIETY=BW148

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.30	2.82	58.10	63.40	7.93	4.59
K_WT	35.07	4.30	30.10	37.60	18.50	12.27
LG	63.33	18.58	42.00	76.00	345.33	29.34
SM	0.67	1.15	0.00	2.00	1.33	173.21
WHT_ASH	1.55	0.15	1.37	1.65	0.02	9.94
WHT_PRO	16.33	0.85	15.50	17.20	0.72	5.21
HARD	88.67	15.50	71.00	100.00	240.33	17.48
EXTR	68.30	1.32	67.30	69.80	1.75	1.94
FL_ASH	0.42	0.02	0.41	0.44	0.00	3.61
FL_PRO	15.87	1.01	14.70	16.50	1.02	6.38
MIXO	3.33	0.58	3.00	4.00	0.33	17.32
BAKE_ABS	62.50	1.35	61.40	64.00	1.81	2.15
LOAF_VOL	188.67	3.21	185.00	191.00	10.33	1.70

VARIETY=BW150

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.33	2.37	58.60	62.70	5.60	3.86
K_WT	34.97	4.47	29.80	37.60	20.02	12.80
LG	57.33	18.56	38.00	75.00	344.33	32.37
SM	0.67	0.58	0.00	1.00	0.33	86.60
WHT_ASH	1.47	0.20	1.26	1.65	0.04	13.41
WHT_PRO	15.37	1.19	14.40	16.70	1.42	7.76
HARD	92.00	16.52	75.00	108.00	273.00	17.96
EXTR	67.97	0.84	67.00	68.50	0.70	1.23
FL_ASH	0.37	0.03	0.34	0.40	0.00	8.11
FL_PRO	14.70	1.20	13.50	15.90	1.44	8.16
MIXO	3.00	0.00	3.00	3.00	0.00	0.00
BAKE_ABS	60.73	1.10	59.60	61.80	1.21	1.81
LOAF_VOL	203.00	4.00	199.00	207.00	16.00	1.97

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 39

VARIETY=BW152

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.67	2.34	59.00	63.40	5.49	3.80
K_WT	35.87	4.43	30.90	39.40	19.60	12.34
LG	59.33	18.18	39.00	74.00	330.33	30.63
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.44	0.17	1.24	1.56	0.03	11.98
WHT_PRO	15.83	0.95	14.90	16.80	0.90	6.00
HARD	93.33	15.14	76.00	104.00	229.33	16.23
EXTR	68.33	0.55	67.80	68.90	0.30	0.81
FL_ASH	0.38	0.02	0.36	0.39	0.00	4.06
FL_PRO	15.27	1.21	13.90	16.20	1.46	7.92
MIXO	2.67	0.58	2.00	3.00	0.33	21.65
BAKE_ABS	58.83	2.29	56.20	60.30	5.22	3.88
LOAF_VOL	197.67	3.06	195.00	201.00	9.33	1.55

VARIETY=CHRIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.50	2.23	59.10	63.50	4.96	3.62
K_WT	37.47	12.01	27.50	50.80	144.22	32.05
LG	56.33	30.27	24.00	84.00	916.33	53.74
SM	0.67	1.15	0.00	2.00	1.33	173.21
WHT_ASH	1.38	0.09	1.31	1.48	0.01	6.44
WHT_PRO	14.23	2.43	11.60	16.40	5.92	17.10
HARD	81.33	11.02	74.00	94.00	121.33	13.54
EXTR	66.63	1.99	64.90	68.80	3.94	2.98
FL_ASH	0.40	0.02	0.39	0.42	0.00	3.79
FL_PRO	13.63	2.57	10.90	16.00	6.60	18.85
MIXO	2.67	0.58	2.00	3.00	0.33	21.65
BAKE_ABS	58.73	3.48	56.20	62.70	12.10	5.92
LOAF_VOL	184.67	5.51	181.00	191.00	30.33	2.98

VARIETY=ERA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.00	2.77	58.80	63.70	7.69	4.47
K_WT	34.00	4.42	28.90	36.60	19.51	12.99
LG	54.67	21.57	30.00	70.00	465.33	39.46
SM	1.33	1.53	0.00	3.00	2.33	114.56
WHT_ASH	1.42	0.11	1.30	1.50	0.01	7.58
WHT_PRO	13.43	1.31	12.40	14.90	1.70	9.72
HARD	85.00	17.35	65.00	96.00	301.00	20.41
EXTR	69.27	2.15	67.60	71.70	4.64	3.11
FL_ASH	0.40	0.02	0.38	0.41	0.00	3.85
FL_PRO	12.40	1.21	11.70	13.80	1.47	9.78
MIXO	2.00	0.00	2.00	2.00	0.00	0.00
BAKE_ABS	57.60	4.66	53.80	62.80	21.72	8.09
LOAF_VOL	190.67	5.86	184.00	195.00	34.33	3.07

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 40

VARIETY=MARQUIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.80	2.77	58.60	63.50	7.69	4.49
K_WT	34.37	3.06	31.70	37.70	9.33	8.89
LG	56.00	18.08	37.00	73.00	327.00	32.29
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.42	0.13	1.28	1.53	0.02	9.06
WHT_PRO	14.20	0.20	14.00	14.40	0.04	1.41
HARD	81.67	11.15	69.00	90.00	124.33	13.65
EXTR	66.77	1.36	65.70	68.30	1.85	2.04
FL_ASH	0.44	0.03	0.41	0.47	0.00	6.89
FL_PRO	13.57	0.35	13.20	13.90	0.12	2.59
MIXO	2.67	0.58	2.00	3.00	0.33	21.65
BAKE ABS	58.37	2.06	56.20	60.30	4.24	3.53
LOAF VOL	194.67	7.02	188.00	202.00	49.33	3.61

VARIETY=MN88076

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.00	2.27	59.40	63.60	5.16	3.66
K_WT	38.37	3.97	33.80	41.00	15.76	10.35
LG	79.67	10.41	68.00	88.00	108.33	13.06
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.45	0.15	1.31	1.60	0.02	10.07
WHT_PRO	14.80	0.56	14.20	15.30	0.31	3.76
HARD	90.67	15.63	74.00	105.00	244.33	17.24
EXTR	69.10	1.05	68.10	70.20	1.11	1.52
FL_ASH	0.38	0.03	0.36	0.41	0.00	7.66
FL_PRO	13.83	0.32	13.60	14.20	0.10	2.32
MIXO	3.33	0.58	3.00	4.00	0.33	17.32
BAKE_ABS	61.30	0.70	60.50	61.80	0.49	1.14
LOAF_VOL	200.00	6.00	194.00	206.00	36.00	3.00

VARIETY=MN88334

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.77	1.79	59.80	63.30	3.20	2.90
K WT	33.40	2.79	30.30	35.70	7.77	8.35
LG	51.33	18.77	31.00	68.00	352.33	36.57
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.33	0.10	1.22	1.40	0.01	7.25
WHT_PRO	14.13	0.40	13.90	14.60	0.16	2.86
HARD	77.00	6.24	70.00	82.00	39.00	8.11
EXTR	68.57	1.62	66.70	69.60	2.62	2.36
FL_ASH	0.36	0.03	0.34	0.39	0.00	7.35
FL_PRO	13.37	0.65	12.70	14.00	0.42	4.87
MIXO	2.00	0.00	2.00	2.00	0.00	0.00
BAKE_ABS	57.93	1.83	56.50	60.00	3.36	3.17
LOAF_VOL	187.67	5.13	182.00	192.00	26.33	2.73

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 41

VARIETY=MN88415

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.03	2.20	59.50	63.40	4.82	3.54
K_WT	39.10	3.35	35.70	42.40	11.23	8.57
LG	65.00	15.10	49.00	79.00	228.00	23.23
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.45	0.17	1.27	1.59	0.03	11.35
WHT_PRO	14.63	0.15	14.50	14.80	0.02	1.04
HARD	84.67	10.21	73.00	92.00	104.33	12.06
EXTR	68.20	1.28	67.10	69.60	1.63	1.87
FL_ASH	0.39	0.03	0.37	0.42	0.00	6.40
FL_PRO	14.10	0.36	13.70	14.40	0.13	2.56
MIXO	3.00	0.00	3.00	3.00	0.00	0.00
BAKE_ABS	59.40	0.85	58.60	60.30	0.73	1.44
LOAF_VOL	193.33	10.69	184.00	205.00	114.33	5.53

VARIETY=MN89028

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.60	2.54	58.70	63.40	6.43	4.12
K_WT	41.13	4.44	36.40	45.20	19.69	10.79
LG	74.67	12.66	61.00	86.00	160.33	16.96
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.42	0.10	1.30	1.48	0.01	7.14
WHT_PRO	15.37	0.12	15.30	15.50	0.01	0.75
HARD	83.00	12.77	69.00	94.00	163.00	15.38
EXTR	67.33	1.86	65.80	69.40	3.45	2.76
FL_ASH	0.38	0.01	0.38	0.39	0.00	1.51
FL_PRO	14.87	0.29	14.70	15.20	0.08	1.94
MIXO	2.33	0.58	2.00	3.00	0.33	24.74
BAKE_ABS	61.03	0.68	60.50	61.80	0.46	1.12
LOAF_VOL	208.33	3.21	206.00	212.00	10.33	1.54

VARIETY=MN89408

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.97	2.87	58.70	64.10	8.25	4.64
K_WT	36.83	4.88	31.20	39.80	23.82	13.25
LG	60.00	18.36	39.00	73.00	337.00	30.60
SM	1.00	1.73	0.00	3.00	3.00	173.21
WHT_ASH	1.36	0.13	1.22	1.48	0.02	9.64
WHT_PRO	13.80	0.35	13.60	14.20	0.12	2.51
HARD	94.00	13.45	79.00	105.00	181.00	14.31
EXTR	68.43	1.31	67.20	69.80	1.70	1.91
FL_ASH	0.43	0.02	0.40	0.44	0.00	5.41
FL_PRO	12.63	0.50	12.10	13.10	0.25	3.98
MIXO	3.00	0.00	3.00	3.00	0.00	0.00
BAKE_ABS	58.93	4.20	54.30	62.50	17.66	7.13
LOAF_VOL	192.00	1.73	190.00	193.00	3.00	0.90

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 42

VARIETY=MT8849

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.53	3.02	58.10	63.80	9.14	4.91
K_WT	38.40	5.88	31.70	42.70	34.57	15.31
LG	64.00	21.63	40.00	82.00	468.00	33.80
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.46	0.13	1.32	1.57	0.02	8.74
WHT_PRO	14.10	0.70	13.60	14.90	0.49	4.96
HARD	87.67	18.01	67.00	100.00	324.33	20.54
EXTR	67.30	1.56	65.50	68.30	2.44	2.32
FL_ASH	0.40	0.01	0.39	0.41	0.00	2.50
FL_PRO	13.50	1.05	12.50	14.60	1.11	7.80
MIXO	4.33	0.58	4.00	5.00	0.33	13.32
BAKE_ABS	59.57	2.11	57.60	61.80	4.46	3.55
LOAF_VOL	189.67	4.51	185.00	194.00	20.33	2.38

VARIETY=ND671

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.43	2.01	60.20	64.10	4.04	3.22
K_WT	36.43	2.19	33.90	37.70	4.81	6.02
LG	68.67	8.39	59.00	74.00	70.33	12.21
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.48	0.17	1.30	1.64	0.03	11.55
WHT_PRO	16.07	0.55	15.70	16.70	0.30	3.43
HARD	90.67	17.62	71.00	105.00	310.33	19.43
EXTR	67.90	1.28	66.80	69.30	1.63	1.88
FL_ASH	0.36	0.03	0.33	0.39	0.00	8.57
FL_PRO	15.83	0.55	15.30	16.40	0.30	3.48
MIXO	3.67	0.58	3.00	4.00	0.33	15.75
BAKE_ABS	62.83	1.50	61.40	64.40	2.26	2.39
LOAF_VOL	205.33	1.53	204.00	207.00	2.33	0.74

VARIETY=ND673

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.63	2.74	59.50	64.60	7.52	4.38
K_WT	40.13	6.19	33.00	44.10	38.32	15.43
LG	72.33	17.79	52.00	85.00	316.33	24.59
SM	0.67	1.15	0.00	2.00	1.33	173.21
WHT_ASH	1.43	0.14	1.27	1.53	0.02	9.79
WHT_PRO	15.33	0.75	14.60	16.10	0.56	4.89
HARD	81.67	15.37	64.00	92.00	236.33	18.82
EXTR	69.23	1.70	68.20	71.20	2.90	2.46
FL_ASH	0.37	0.02	0.35	0.39	0.00	5.41
FL_PRO	14.90	1.01	13.80	15.80	1.03	6.81
MIXO	4.00	0.00	4.00	4.00	0.00	0.00
BAKE_ABS	61.57	3.01	58.20	64.00	9.06	4.89
LOAF_VOL	198.33	4.04	194.00	202.00	16.33	2.04

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 43

VARIETY=ND675

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	63.23	2.73	60.10	65.10	7.45	4.32
K_WT	40.60	5.04	35.10	45.00	25.41	12.42
LG	79.67	11.93	66.00	88.00	142.33	14.98
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.49	0.14	1.35	1.62	0.02	9.09
WHT_PRO	16.13	0.61	15.60	16.80	0.37	3.79
HARD	94.33	14.84	78.00	107.00	220.33	15.74
EXTR	69.23	2.50	67.50	72.10	6.25	3.61
FL_ASH	0.41	0.02	0.39	0.43	0.00	5.04
FL_PRO	15.77	0.95	14.80	16.70	0.90	6.03
MIXO	4.67	0.58	4.00	5.00	0.33	12.37
BAKE_ABS	63.50	1.90	61.40	65.10	3.61	2.99
LOAF_VOL	208.00	3.00	205.00	211.00	9.00	1.44

VARIETY=ND681

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.30	3.21	57.60	63.30	10.29	5.23
K_WT	38.50	4.22	33.90	42.20	17.83	10.97
LG	67.00	15.13	50.00	79.00	229.00	22.59
SM	0.67	1.15	0.00	2.00	1.33	173.21
WHT_ASH	1.49	0.14	1.35	1.63	0.02	9.43
WHT_PRO	15.90	0.60	15.30	16.50	0.36	3.77
HARD	81.33	10.97	69.00	90.00	120.33	13.49
EXTR	67.13	2.51	65.30	70.00	6.32	3.75
FL_ASH	0.38	0.02	0.36	0.39	0.00	4.06
FL_PRO	15.63	0.86	14.70	16.40	0.74	5.51
MIXO	4.00	0.00	4.00	4.00	0.00	0.00
BAKE_ABS	63.67	3.59	60.80	67.70	12.92	5.65
LOAF_VOL	215.00	12.12	204.00	228.00	147.00	5.64

VARIETY=ND682

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	63.17	1.89	61.00	64.50	3.58	3.00
K_WT	38.47	3.37	34.60	40.80	11.37	8.77
LG	61.33	17.95	41.00	75.00	322.33	29.27
SM	0.67	1.15	0.00	2.00	1.33	173.21
WHT_ASH	1.45	0.13	1.30	1.54	0.02	9.02
WHT_PRO	15.23	0.55	14.60	15.60	0.30	3.62
HARD	88.33	11.72	75.00	97.00	137.33	13.27
EXTR	67.23	1.65	65.60	68.90	2.72	2.45
FL_ASH	0.39	0.03	0.36	0.42	0.00	7.69
FL_PRO	14.57	0.84	13.60	15.10	0.70	5.76
MIXO	3.33	0.58	3.00	4.00	0.33	17.32
BAKE_ABS	64.03	3.93	59.60	67.10	15.46	6.14
LOAF_VOL	194.33	16.92	180.00	213.00	286.33	8.71

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 44

VARIETY=N86-0348

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.20	3.36	57.40	63.80	11.32	5.50
K_WT	37.07	5.35	30.90	40.50	28.64	14.44
LG	68.33	17.21	49.00	82.00	296.33	25.19
SM	0.67	1.15	0.00	2.00	1.33	173.21
WHT_ASH	1.44	0.11	1.32	1.51	0.01	7.41
WHT_PRO	14.67	0.40	14.20	14.90	0.16	2.76
HARD	72.67	11.85	59.00	80.00	140.33	16.30
EXTR	66.00	2.70	62.90	67.80	7.27	4.09
FL_ASH	0.42	0.03	0.39	0.44	0.00	6.04
FL_PRO	14.00	0.75	13.20	14.70	0.57	5.39
MIXO	3.67	0.58	3.00	4.00	0.33	15.75
BAKE_ABS	61.80	1.73	60.80	63.80	3.00	2.80
LOAF_VOL	202.67	9.29	192.00	209.00	86.33	4.58

VARIETY=N87-0306

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.00	3.66	57.80	64.50	13.39	5.90
K_WT	39.00	5.65	32.50	42.70	31.89	14.48
LG	72.67	17.93	52.00	84.00	321.33	24.67
SM	0.67	1.15	0.00	2.00	1.33	173.21
WHT_ASH	1.42	0.15	1.25	1.54	0.02	10.76
WHT_PRO	14.30	0.66	13.60	14.90	0.43	4.59
HARD	83.67	23.50	60.00	107.00	552.33	28.09
EXTR	69.00	2.42	66.80	71.60	5.88	3.51
FL_ASH	0.38	0.02	0.36	0.40	0.00	5.43
FL_PRO	13.70	0.46	13.30	14.20	0.21	3.34
MIXO	3.33	0.58	3.00	4.00	0.33	17.32
BAKE_ABS	61.23	1.42	59.60	62.10	2.00	2.31
LOAF_VOL	200.00	6.56	193.00	206.00	43.00	3.28

VARIETY=N88-0022

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.37	2.57	59.40	64.00	6.62	4.13
K_WT	41.93	3.71	37.90	45.20	13.76	8.85
LG	83.33	5.51	78.00	89.00	30.33	6.61
SM	0.00	0.00	0.00	0.00	0.00	.
WHT_ASH	1.37	0.11	1.24	1.45	0.01	8.29
WHT_PRO	14.40	0.17	14.20	14.50	0.03	1.20
HARD	79.67	12.34	66.00	90.00	152.33	15.49
EXTR	67.80	2.02	66.30	70.10	4.09	2.98
FL_ASH	0.38	0.02	0.36	0.40	0.00	5.53
FL_PRO	13.70	0.46	13.30	14.20	0.21	3.34
MIXO	2.67	0.58	2.00	3.00	0.33	21.65
BAKE_ABS	59.90	2.60	56.90	61.40	6.75	4.34
LOAF_VOL	200.67	3.21	197.00	203.00	10.33	1.60

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 45

VARIETY=N88-3034

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.03	2.40	57.40	62.10	5.76	4.00
K_WT	33.40	3.40	29.70	36.40	11.59	10.19
LG	53.00	14.53	39.00	68.00	211.00	27.41
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.56	0.21	1.32	1.70	0.04	13.39
WHT_PRO	15.87	0.57	15.40	16.50	0.32	3.58
HARD	82.67	12.66	69.00	94.00	160.33	15.32
EXTR	68.23	0.70	67.50	68.90	0.49	1.03
FL_ASH	0.41	0.02	0.40	0.43	0.00	4.22
FL_PRO	15.50	0.66	14.80	16.10	0.43	4.23
MIXO	2.33	0.58	2.00	3.00	0.33	24.74
BAKE_ABS	60.50	1.08	59.30	61.40	1.17	1.79
LOAF_VOL	206.67	3.79	204.00	211.00	14.33	1.83

VARIETY=N88-3136

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.17	2.75	59.10	64.40	7.54	4.42
K_WT	36.17	4.48	31.00	38.90	20.04	12.38
LG	66.67	16.65	48.00	80.00	277.33	24.98
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.47	0.13	1.32	1.56	0.02	8.90
WHT_PRO	15.10	0.46	14.60	15.50	0.21	3.03
HARD	81.67	15.70	64.00	94.00	246.33	19.22
EXTR	68.10	2.23	66.30	70.60	4.99	3.28
FL_ASH	0.40	0.03	0.38	0.43	0.00	6.61
FL_PRO	14.70	0.79	13.80	15.30	0.63	5.40
MIXO	3.33	0.58	3.00	4.00	0.33	17.32
BAKE_ABS	60.70	0.96	59.60	61.40	0.93	1.59
LOAF_VOL	200.67	7.77	192.00	207.00	60.33	3.87

VARIETY=PH986-61

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.70	3.21	58.00	63.80	10.33	5.21
K WT	47.50	6.78	40.00	53.20	45.99	14.28
LG	83.67	15.37	66.00	94.00	236.33	18.37
SM	0.67	1.15	0.00	2.00	1.33	173.21
WHT_ASH	1.44	0.10	1.34	1.54	0.01	6.94
WHT_PRO	14.87	0.49	14.30	15.20	0.24	3.32
HARD	71.00	18.25	50.00	83.00	333.00	25.70
EXTR	62.60	2.62	60.40	65.50	6.87	4.19
FL_ASH	0.41	0.02	0.38	0.42	0.00	5.68
FL_PRO	14.67	0.71	13.90	15.30	0.50	4.84
MIXO	4.00	0.00	4.00	4.00	0.00	0.00
BAKE_ABS	61.47	1.96	59.30	63.10	3.82	3.18
LOAF_VOL	211.67	8.08	203.00	219.00	65.33	3.82

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 46

VARIETY=SD3056

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.50	2.79	58.40	63.80	7.77	4.53
K_WT	38.47	3.63	35.80	42.60	13.17	9.44
LG	75.33	8.74	68.00	85.00	76.33	11.60
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.43	0.06	1.38	1.50	0.00	4.37
WHT_PRO	15.20	0.80	14.40	16.00	0.64	5.26
HARD	92.33	9.45	85.00	103.00	89.33	10.24
EXTR	68.13	1.50	66.60	69.60	2.25	2.20
FL_ASH	0.41	0.02	0.40	0.43	0.00	3.70
FL_PRO	14.83	0.49	14.50	15.40	0.24	3.33
MIXO	3.00	0.00	3.00	3.00	0.00	0.00
BAKE_ABS	60.97	0.91	60.00	61.80	0.82	1.49
LOAF_VOL	206.33	8.50	200.00	216.00	72.33	4.12

VARIETY=SD8070

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.37	2.75	59.20	64.20	7.58	4.42
K_WT	37.17	4.22	32.30	39.70	17.77	11.34
LG	67.33	16.77	48.00	78.00	281.33	24.91
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.41	0.16	1.24	1.55	0.02	11.11
WHT_PRO	15.00	0.44	14.50	15.30	0.19	2.91
HARD	90.33	15.04	73.00	100.00	226.33	16.65
EXTR	69.17	1.31	67.80	70.40	1.70	1.89
FL_ASH	0.36	0.02	0.34	0.37	0.00	4.81
FL_PRO	14.37	0.78	13.50	15.00	0.60	5.41
MIXO	3.33	0.58	3.00	4.00	0.33	17.32
BAKE_ABS	61.83	2.46	59.00	63.40	6.04	3.98
LOAF_VOL	212.67	9.87	206.00	224.00	97.33	4.64

VARIETY=SD8072

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.37	3.04	59.00	64.90	9.22	4.87
K_WT	38.67	5.24	32.80	42.90	27.50	13.56
LG	75.00	14.73	58.00	84.00	217.00	19.64
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.47	0.22	1.22	1.61	0.05	14.76
WHT_PRO	15.40	0.75	14.60	16.10	0.57	4.90
HARD	89.33	16.80	71.00	104.00	282.33	18.81
EXTR	69.93	1.88	68.80	72.10	3.52	2.68
FL_ASH	0.40	0.01	0.39	0.41	0.00	2.91
FL_PRO	14.80	0.82	13.90	15.50	0.67	5.53
MIXO	2.67	0.58	2.00	3.00	0.33	21.65
BAKE_ABS	60.67	1.76	59.00	62.50	3.08	2.89
LOAF_VOL	188.67	4.04	184.00	191.00	16.33	2.14

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 47

VARIETY=SD8073

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.33	2.95	59.00	64.60	8.69	4.73
K WT	38.83	6.62	31.30	43.70	43.77	17.04
LG	72.67	20.03	50.00	88.00	401.33	27.57
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.41	0.12	1.27	1.51	0.02	8.77
WHT_PRO	14.87	0.55	14.50	15.50	0.30	3.70
HARD	85.33	15.89	67.00	95.00	252.33	18.62
EXTR	68.27	2.32	65.80	70.40	5.37	3.40
FL_ASH	0.41	0.02	0.39	0.42	0.00	4.22
FL_PRO	14.23	0.55	13.60	14.60	0.30	3.87
MIXO	3.33	0.58	3.00	4.00	0.33	17.32
BAKE_ABS	61.17	2.20	59.00	63.40	4.84	3.60
LOAF_VOL	191.33	3.51	188.00	195.00	12.33	1.84

VARIETY=SD8074

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.40	2.95	58.00	63.20	8.68	4.80
K_WT	34.70	4.41	30.10	38.90	19.48	12.72
LG	61.67	18.23	42.00	78.00	332.33	29.56
SM	0.67	1.15	0.00	2.00	1.33	173.21
WHT_ASH	1.45	0.13	1.31	1.57	0.02	9.04
WHT_PRO	15.23	0.23	15.10	15.50	0.05	1.52
HARD	85.67	17.62	67.00	102.00	310.33	20.56
EXTR	66.73	1.27	65.60	68.10	1.60	1.90
FL ASH	0.41	0.01	0.40	0.42	0.00	2.44
FL_PRO	14.77	0.21	14.60	15.00	0.04	1.41
MIXO	4.33	1.15	3.00	5.00	1.33	26.65
BAKE ABS	61.83	0.64	61.10	62.30	0.41	1.04
LOAF VOL	199.00	3.46	197.00	203.00	12.00	1.74

VARIETY=STOA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.03	3.26	57.40	63.70	10.62	5.34
K_WT	35.20	4.77	29.70	38.20	22.75	13.55
LG	57.33	21.36	33.00	73.00	456.33	37.26
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.41	0.11	1.30	1.52	0.01	7.79
WHT_PRO	14.80	0.66	14.10	15.40	0.43	4.43
HARD	86.33	14.57	70.00	98.00	212.33	16.88
EXTR	69.07	2.40	66.60	71.40	5.77	3.48
FL_ASH	0.37	0.02	0.35	0.39	0.00	5.41
FL_PRO	14.27	0.57	13.80	14.90	0.32	3.99
MIXO	3.33	0.58	3.00	4.00	0.33	17.32
BAKE_ABS	60.23	0.90	59.30	61.10	0.81	1.50
LOAF_VOL	192.33	2.89	189.00	194.00	8.33	1.50

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 48

VARIETY=TR983-239

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.57	2.66	59.50	64.30	7.09	4.26
K_WT	48.93	6.65	41.50	54.30	44.16	13.58
LG	83.00	11.53	71.00	94.00	133.00	13.89
SM	0.33	0.58	0.00	1.00	0.33	173.21
WHT_ASH	1.50	0.11	1.39	1.60	0.01	7.02
WHT_PRO	14.80	0.50	14.30	15.30	0.25	3.38
HARD	75.00	23.64	50.00	97.00	559.00	31.52
EXTR	65.77	1.10	64.50	66.50	1.21	1.67
FL ASH	0.43	0.02	0.41	0.44	0.00	3.58
FL_PRO	14.00	0.53	13.40	14.40	0.28	3.78
MIXO	3.33	0.58	3.00	4.00	0.33	17.32
BAKE ABS	62.53	1.77	60.50	63.70	3.12	2.83
LOAF_VOL	201.33	7.02	194.00	208.00	49.33	3.49

VARIETY=XW397A3

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.87	2.57	58.90	63.40	6.60	4.15
K_WT	39.77	4.83	34.20	42.90	23.36	12.15
LG	73.33	17.79	53.00	86.00	316.33	24.25
SM	0.67	1.15	0.00	2.00	1.33	173.21
WHT_ASH	1.46	0.14	1.30	1.56	0.02	9.59
WHT_PRO	15.30	0.98	14.50	16.40	0.97	6.44
HARD	108.00	9.85	97.00	116.00	97.00	9.12
EXTR	70.13	1.10	69.50	71.40	1.20	1.56
FL_ASH	0.43	0.03	0.41	0.46	0.00	6.77
FL_PRO	14.27	1.05	13.20	15.30	1.10	7.36
MIXO	3.00	0.00	3.00	3.00	0.00	0.00
BAKE ABS	60.77	2.32	58.20	62.70	5.36	3.81
LOAF VOL	196.33	4.04	192.00	200.00	16.33	2.06

VARIETY=XW398A4

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	62.39	2.29	59.80	64.20	5.24	3.67
K_WT	41.97	4.21	37.20	45.20	17.76	10.04
LG	75.00	12.49	61.00	85.00	156.00	16.65
SM	0.00	0.00	0.00	0.00	0.00	.
WHT_ASH	1.46	0.15	1.33	1.63	0.02	10.44
WHT_PRO	14.63	0.65	14.00	15.30	0.42	4.45
HARD	75.67	15.31	58.00	85.00	234.33	20.23
EXTR	67.43	1.63	66.30	69.30	2.65	2.42
FL_ASH	0.42	0.01	0.41	0.43	0.00	2.73
FL_PRO	14.23	1.03	13.10	15.10	1.05	7.21
MIXO	3.67	0.58	3.00	4.00	0.33	15.75
BAKE_ABS	61.03	3.04	57.60	63.40	9.26	4.99
LOAF_VOL	207.00	11.27	194.00	214.00	127.00	5.44

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=MONTANA STATION=BOZEMAN NURSERY=UNIFORM

TABLE 49

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		57.6	26.5	23	4	1.79	16.8	94	4	65.7	0.55	16.0	5	3	59.0	4
CHRIS		52.3	29.3	6	11	1.71	15.8	85	3	61.4	0.54	15.1	5	2	63.7	3
ERA	S	55.8	23.3	3	16	1.77	14.8	89	1	66.6	0.53	13.9	5	4	61.1	4
STOA	S	59.4	30.8	27	1	1.65	15.6	89	4	69.6	0.44	14.9	5	4	63.4	4
BUTTE 86	S	60.3	31.2	32	1	1.63	15.6	97	4	67.6	0.47	14.4	5	4	61.8	2
SD3056		58.6	26.3	19	2	1.66	16.0	83	4	66.3	0.51	15.5	5	4	59.6	2
SD8072		61.5	34.4	61	6	1.61	14.8	98	4	69.6	0.49	13.6	5	4	59.6	2
SD8073		60.9	33.2	48	3	1.60	14.8	100	4	69.2	0.50	13.6	5	4	61.8	2
SD8074		61.2	29.9	21	1	1.60	15.5	102	4	67.2	0.53	14.2	5	4	61.4	2
SD8070		61.1	29.4	18	2	1.62	15.5	98	4	68.3	0.49	14.7	5	4	60.8	2
MN88334		58.3	25.4	8	10	1.62	15.1	87	4	67.7	0.47	14.0	5	4	57.9	2
MN88076		60.0	31.2	42	2	1.63	15.0	95	4	67.7	0.47	13.5	5	4	58.6	2
MN88415		61.5	34.8	32	0	1.60	15.1	98	4	66.8	0.48	14.1	5	4	57.6	2
MN89028		59.5	30.9	31	3	1.64	15.2	91	4	65.3	0.48	14.0	5	3	60.0	2
MN89408		54.2	24.8	8	12	1.84	15.8	103	3	64.5	0.60	14.4	5	3	60.5	3
ND671		61.9	30.1	31	0	1.63	16.0	83	4	68.2	0.43	15.9	5	4	64.0	3
ND673		59.1	29.3	26	4	1.63	16.0	85	4	66.8	0.45	15.5	5	4	62.5	5
ND675		60.5	29.8	30	3	1.67	16.3	92	4	66.8	0.55	15.7	5	4	60.8	3
ND681		58.8	29.6	22	2	1.73	16.4	97	4	68.7	0.46	15.9	5	4	61.4	3
ND682		59.3	27.9	15	1	1.73	15.9	90	4	66.5	0.47	15.1	5	4	61.1	4
XW398A4		59.6	31.6	18	4	1.67	15.5	81	4	66.6	0.51	14.7	5	4	61.8	5
XW397A3		59.0	28.2	24	4	1.70	15.4	99	4	67.5	0.54	13.9	5	4	59.6	3
N87-0306		57.6	28.7	24	5	1.69	15.8	93	4	67.7	0.44	15.1	5	4	62.1	5
N88-0022		59.7	31.1	60	2	1.63	14.8	80	4	67.9	0.46	13.5	5	4	59.6	2
N88-3136		61.1	30.7	46	1	1.69	15.5	91	4	68.7	0.47	14.4	5	4	60.3	2
N88-3034		58.4	30.5	38	0	1.80	16.4	95	4	68.3	0.49	15.5	5	4	59.6	1
N86-0348		54.2	24.5	16	8	1.84	16.2	84	3	61.7	0.51	15.7	5	2	63.7	3
MT8849		58.5	33.0	37	2	1.69	15.2	98	4	66.7	0.47	14.2	5	4	60.5	5
BW148		61.4	32.8	55	0	1.62	16.0	103	4	68.7	0.51	15.1	5	4	60.0	2
BW150		59.8	28.9	22	2	1.63	15.9	96	4	67.0	0.48	14.8	5	4	57.6	1
BW152		60.4	30.6	40	2	1.57	16.2	96	4	68.7	0.46	15.3	5	4	56.2	1
PH986-61		59.1	37.0	44	1	1.61	15.4	74	4	66.3	0.43	15.1	5	4	61.1	5
TR983-239		59.9	38.3	50	1	1.62	15.4	82	4	64.8	0.50	14.3	5	3	62.1	3

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=MONTANA STATION=BOZEMAN NURSERY=UNIFORM

TABLE 49 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		59.0	4.00	9	8.5	8.0	197	2	3.0	MI				MI					MJ					
CHRIS		63.7	3.00	9	8.5	8.0	214	4	3.0	MJ		MI		MJ										
ERA	S	61.1	4.00	9	8.0	7.5	204	3	2.7	MJ	MJ	MJ							MI					MI
STOA	S	63.4	4.00	9	8.5	8.0	192	4	4.0															
BUTTE 86	S	61.8	3.00	5	8.5	8.5	178	3	3.7									MI	MI		MI			
SD3056		59.6	2.50	7	8.0	8.0	195	1	3.0		MI							MI	MJ	MI				
SD8072		59.6	2.50	7	8.0	8.5	180	1	3.0									MI	MJ	MI				
SD8073		61.8	3.00	5	7.5	7.5	168	2	3.3									MI	MI		MI	MI	MI	MI
SD8074		61.4	3.00	7	7.5	8.0	180	3	3.7									MI	MI			MI		
SD8070		60.8	3.00	7	8.0	8.0	182	3	3.7									MI	MI					
MN88334		57.9	3.00	7	8.5	8.0	184	2	3.3		MI	MI						MI	MJ					
MN88076		58.6	3.25	7	8.0	8.5	188	2	3.3									MI	MJ					
MN88415		57.6	2.50	5	9.0	8.5	173	1	3.0									MI	MJ	MI	MI			
MN89028		60.0	2.50	7	8.0	8.5	203	1	2.7					MI				MI	MJ	MI				
MN89408		60.5	4.00	9	7.5	8.0	213	3	3.0	MJ	MI	MI		MI	MI				MI			MI		
ND671		64.0	3.00	9	8.5	7.5	199	4	4.0														MI	
ND673		62.5	5.00	9	8.0	8.5	203	4	4.0															
ND675		60.8	3.50	9	8.5	8.5	203	3	3.7										MI					
ND681		61.4	3.50	7	8.5	8.5	195	3	3.7										MI					
ND682		61.1	4.50	7	8.0	8.5	189	3	3.7										MI					
XW398A4		61.8	5.00	9	8.5	8.0	203	3	3.7										MI					
XW397A3		59.6	3.75	9	8.0	8.0	202	2	3.3										MJ					
N87-0306		62.1	4.00	9	8.0	8.0	222	4	4.0	MI														
N88-0022		59.6	3.00	7	9.0	8.5	195	2	3.3									MI	MJ					
N88-3136		60.3	3.75	9	8.5	8.5	213	2	3.3									MI	MJ					
N88-3034		59.6	2.25	7	8.5	8.5	204	1	3.0									MJ	MJ	MI				
N86-0348		63.7	3.00	7	8.5	8.5	199	4	3.0	MJ	MI	MI		MJ										
MT8849		60.5	6.00	7	9.0	8.0	202	2	3.3										MI	MI				
BW148		60.0	2.50	5	8.0	7.0	184	1	3.0									MI	MJ	MI	MI			MI
BW150		57.6	2.25	5	8.0	7.5	189	1	3.0									MJ	MJ	MI	MI			MI
BW152		56.2	2.25	5	7.5	8.5	185	1	3.0									MJ	MJ	MI	MI	MI		
PH986-61		61.1	4.50	9	9.0	8.0	213	3	3.7										MI					
TR983-239		62.1	3.00	7	9.0	8.5	198	4	3.7					MI										

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	26.3	8	13.9	65.8	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	7.5	7.5	170
MAJOR FAULTING VALUES	56.9	23.3	18	12.9	63.8	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	5.0	5.0	160

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=IDAHO STATION=ABERDEEN NURSERY=UNIFORM

TABLE 50

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		58.0	33.0	54	4	1.77	15.2	77	4	66.0	0.39	15.2	5	4	60.8	2
CHRIS		58.6	29.2	37	1	1.59	14.3	78	4	65.7	0.45	14.2	5	4	59.3	1
ERA	S	57.4	24.9	15	5	1.73	12.9	86	1	67.3	0.47	11.8	5	2	57.6	2
STOA	S	59.4	36.1	64	0	1.56	14.2	85	4	68.8	0.39	13.9	5	4	59.0	2
BUTTE 86	S	60.1	38.0	69	1	1.64	13.8	86	3	65.9	0.38	12.7	5	3	58.2	2
SD3056		60.7	39.1	83	0	1.58	12.9	88	2	65.4	0.47	11.9	5	2	57.9	1
SD8072		60.6	37.2	81	0	1.61	12.3	89	2	67.3	0.44	11.3	5	2	55.8	1
SD8073		58.1	33.8	56	0	1.69	13.5	92	3	65.7	0.48	13.0	5	4	58.2	2
SD8074		59.9	26.8	68	0	1.64	12.8	84	1	66.3	0.43	12.2	5	2	57.6	2
SD8070		60.5	35.5	61	1	1.58	12.6	91	2	65.6	0.44	11.7	5	2	55.5	1
MN88334		59.2	27.7	34	2	1.54	12.6	85	1	68.1	0.42	11.3	5	2	54.6	1
MN88076		60.9	37.6	73	0	1.56	12.4	83	2	66.7	0.42	11.0	5	2	57.3	2
MN89028		59.9	35.1	52	0	1.55	11.2	80	2	65.7	0.44	10.1	5	2	56.9	1
MN89408		59.1	30.9	44	2	1.61	12.2	105	2	64.6	0.52	10.9	5	1	57.3	1
ND671		61.7	36.2	69	0	1.68	14.3	84	4	67.6	0.40	14.0	5	4	59.6	2
ND673		61.0	38.5	70	1	1.64	12.2	82	2	67.1	0.42	11.7	5	2	57.3	1
ND675		62.8	40.0	84	0	1.58	13.1	84	3	67.8	0.44	12.4	5	2	58.6	2
ND681		60.1	33.4	NA	NA	1.78	14.6	79	4	NA	NA	NA	NA	4	NA	NA
ND682		60.7	34.1	NA	NA	1.65	12.4	89	2	NA	NA	NA	NA	4	NA	NA
XW398A4		60.9	39.1	72	0	1.65	11.5	76	2	66.8	0.54	10.8	5	2	54.6	1
XW397A3		60.5	35.7	67	0	1.58	11.4	98	2	66.2	0.53	9.7	5	2	54.6	1
N87-0306		59.8	33.9	58	0	1.59	12.6	88	2	67.3	0.45	11.5	5	2	59.0	2
N88-3136		59.9	35.6	69	0	1.67	13.4	78	3	66.7	0.50	12.6	5	3	59.3	2
N88-3034		56.2	30.9	48	0	1.82	14.5	85	3	63.8	0.49	13.9	5	3	55.8	1
N88-0022		58.9	25.6	66	1	1.58	12.6	81	1	67.5	0.47	11.6	5	2	55.5	1
N86-0348		60.9	35.2	65	0	1.72	11.6	81	2	64.7	0.46	10.7	5	1	55.8	1
MT8849		60.5	35.2	55	1	1.73	11.8	79	2	62.5	0.49	10.8	5	1	55.0	2
BW148		60.3	33.1	63	0	1.76	13.4	86	3	65.7	0.51	12.7	5	3	57.6	2
BW150		59.9	33.9	57	0	1.64	14.3	93	4	64.3	0.46	13.7	5	3	56.5	1
BW152		60.6	34.4	61	0	1.56	13.1	81	3	66.3	0.49	12.5	5	3	53.2	1
PH986-61		59.9	43.1	72	1	1.58	12.1	68	2	64.0	0.49	11.5	5	1	57.3	1
TR983-239		61.0	44.8	77	0	1.64	11.9	78	2	65.7	0.52	10.8	5	2	56.9	1
PONDERA		61.4	33.6	35	0	1.50	11.5	78	2	65.7	0.49	11.0	5	2	57.6	1
VANDEL		58.4	31.7	43	0	1.68	13.1	77	3	65.2	0.53	12.4	5	1	55.8	1
MN88415		61.3	39.7	65	0	1.62	12.5	80	2	66.3	0.47	11.7	5	2	56.2	2

*NA=NOT AVAILABLE

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=IDAHO STATION=ABERDEEN NURSERY=UNIFORM

TABLE 50 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		.	.	.	.	.	.	.	.									MI						
CHRIS		.	.	.	.	.	.	.	.		MI							MJ						
ERA	S	.	.	.	.	.	.	.	.	MI	MJ		MJ			MJ		MI						
STOA	S	.	.	.	.	.	.	.	.									MI						
BUTTE 86	S	.	.	.	.	.	.	.	.				MI			MI		MI						
SD3056		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
SD8072		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
SD8073		.	.	.	.	.	.	.	.				MI					MI						
SD8074		.	.	.	.	.	.	.	.		MJ		MJ			MJ		MI						
SD8070		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
MN88334		.	.	.	.	.	.	.	.		MJ		MJ			MJ		MJ						
MN88076		.	.	.	.	.	.	.	.				MJ			MJ		MI						
MN89028		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
MN89408		.	.	.	.	.	.	.	.				MJ	MI		MJ		MJ						
ND671		.	.	.	.	.	.	.	.									MI						
ND673		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
ND675		.	.	.	.	.	.	.	.				MI			MJ		MI						
ND681		.	.	.	.	.	.	.	.															
ND682		.	.	.	.	.	.	.	.				MJ											
XW398A4		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
XW397A3		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
N87-0306		.	.	.	.	.	.	.	.				MJ			MJ		MI						
N88-3136		.	.	.	.	.	.	.	.				MI			MI		MI						
N88-3034		.	.	.	.	.	.	.	.	MJ				MI				MJ						
N88-0022		.	.	.	.	.	.	.	.		MJ		MJ			MJ		MJ						
N86-0348		.	.	.	.	.	.	.	.				MJ	MI		MJ		MJ						
MT8849		.	.	.	.	.	.	.	.				MJ	MJ		MJ		MI						
BW148		.	.	.	.	.	.	.	.				MI			MI		MI						
BW150		.	.	.	.	.	.	.	.					MI				MJ						
BW152		.	.	.	.	.	.	.	.				MI			MI		MJ						
PH986-61		.	.	.	.	.	.	.	.				MJ	MI		MJ		MJ						
TR983-239		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
PONDERA		.	.	.	.	.	.	.	.				MJ			MJ		MJ						
VANDEL		.	.	.	.	.	.	.	.				MI	MI		MJ		MJ						
MN88415		.	.	.	.	.	.	.	.				MJ			MJ		MI						

* SAMPLES WERE NOT BAKED

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	30.9	8	13.9	65.2	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	.
MAJOR FAULTING VALUES	56.9	27.9	18	12.9	63.2	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	.

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=WASHINGTON STATION=PULLMAN NURSERY=UNIFORM

TABLE 51

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARQUIS		56.6	25.5	14	0	1.60	15.5	75	3	65.7	0.46	15.5	5	3	60.8	5
CHRIS		57.0	22.7	5	4	1.49	14.5	86	4	66.2	0.44	14.7	5	4	57.3	3
ERA	S	59.4	25.9	15	3	1.38	12.1	76	2	70.0	0.40	11.3	5	2	51.6	1
STOA	S	59.9	26.2	8	0	1.42	12.9	88	2	68.4	0.36	12.4	5	2	55.8	3
BUTTE 86	S	58.7	27.2	12	2	1.39	13.3	82	3	66.5	0.38	12.4	5	2	59.3	4
SD3056		57.8	31.6	31	1	1.37	13.0	84	3	67.8	0.42	12.2	5	2	58.2	3
SD8072		58.4	28.1	19	0	1.38	13.3	81	3	69.6	0.40	12.6	5	3	57.3	3
SD8073		57.7	27.3	12	1	1.38	13.8	81	3	67.5	0.42	13.5	5	4	58.2	4
SD8074		57.2	25.4	7	0	1.31	14.3	74	4	65.9	0.41	14.2	5	3	57.6	5
SD8070		58.0	27.2	11	0	1.28	13.6	79	3	67.0	0.35	13.1	5	4	57.6	3
MN88334		59.7	23.6	5	5	1.31	13.0	81	3	70.5	0.35	12.7	5	3	55.5	2
MN88076		58.1	27.3	20	1	1.39	13.5	86	3	69.4	0.39	12.8	5	3	56.2	3
MN88415		59.8	31.1	10	0	1.35	13.5	83	3	67.1	0.38	13.0	5	4	56.5	2
MN89028		58.4	29.3	14	1	1.33	12.8	70	2	63.9	0.39	12.4	5	1	56.2	3
MN89408		58.3	25.6	12	6	1.35	12.5	89	2	65.4	0.46	11.5	5	1	52.6	2
ND671		60.1	23.6	4	4	1.39	13.9	59	3	62.6	0.35	13.5	5	2	56.5	4
ND673		59.8	26.6	13	0	1.32	12.9	75	2	67.1	0.35	12.6	5	3	58.2	4
ND675		60.9	28.2	20	1	1.36	13.8	82	3	68.1	0.38	13.3	5	4	59.3	4
ND681		56.5	23.5	5	6	1.46	14.1	68	3	64.7	0.38	13.9	5	3	57.6	4
ND682		61.0	24.7	4	7	1.47	13.6	79	3	64.6	0.38	13.3	5	3	59.0	4
XW398A4		57.9	27.0	7	2	1.49	13.8	68	3	64.4	0.45	14.1	5	3	59.3	4
XW397A3		58.2	24.8	11	2	1.43	13.9	98	3	67.3	0.44	13.2	5	4	56.5	4
N87-0306		57.0	26.5	8	3	1.38	12.5	69	2	60.5	0.38	12.0	5	1	55.5	4
N88-0022		57.9	29.9	35	0	1.36	11.8	60	2	60.9	0.39	11.3	5	1	53.2	2
N88-3136		60.3	24.4	9	2	1.33	13.3	74	3	66.8	0.38	13.0	5	4	59.0	3
N88-3034		57.1	23.3	5	3	1.44	14.4	88	4	67.9	0.41	14.3	5	4	59.6	3
N86-0348		58.7	26.0	11	3	1.34	12.5	73	2	61.7	0.41	11.9	5	1	55.0	2
MT8849		59.6	26.0	6	1	1.40	12.5	90	2	64.7	0.41	11.4	5	1	54.3	3
BW148		59.3	27.0	10	0	1.40	14.1	84	4	68.1	0.41	13.7	5	4	57.9	3
BW150		58.2	25.4	4	0	1.36	13.5	85	3	67.0	0.41	12.9	5	3	53.2	2
BW152		59.1	26.2	7	2	1.40	12.3	71	2	67.3	0.37	12.0	5	2	51.3	1
PH986-61		59.0	37.2	54	0	1.27	11.0	62	2	60.0	0.39	10.5	5	1	50.3	1
TR983-239		62.3	40.7	64	0	1.33	12.0	82	2	64.9	0.39	10.8	5	1	54.6	1

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=WASHINGTON STATION=PULLMAN NURSERY=UNIFORM

TABLE 51 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARQUIS		60.8	3.25	7	8.0	8.5	175	3	3.0	MJ				MI				MI						
CHRIS		57.3	3.50	7	8.0	8.0	174	2	3.3	MI	MI							MJ						
ERA	S	51.6	5.75	2	8.0	7.0	157	1	1.7				MJ			MJ		MJ	MJ	MI	MJ			MI
STOA	S	57.8	5.25	5	8.5	8.0	172	2	2.0				MJ			MJ		MJ		MI				
BUTTE 86	S	59.3	4.25	5	8.0	8.0	171	2	2.3				MI			MJ		MJ		MI				
SD3056		58.2	4.00	5	8.0	8.0	174	2	2.3	MI			MI			MJ		MJ		MI				
SD8072		57.3	4.50	5	8.0	8.0	170	2	2.7				MI			MI		MJ		MI				
SD8073		58.2	5.25	5	8.0	8.0	169	2	3.0	MI			MI					MJ		MI				
SD8074		57.6	5.75	4	8.0	8.0	170	1	2.7	MI				MI				MJ	MI	MJ				
SD8070		57.6	4.50	7	8.0	8.5	184	2	3.0				MI					MJ						
MN88334		55.5	3.75	5	8.0	8.0	169	2	2.7			MI	MI			MI		MJ		MI				
MN88076		56.2	5.00	5	8.5	8.0	178	2	2.7				MI			MI		MJ		MI				
MN88415		56.5	3.75	5	9.0	8.5	167	2	3.0				MI					MJ	MJ	MI				
MN89028		56.2	5.25	5	8.0	8.0	174	2	1.7				MJ	MJ		MJ		MJ		MI				
MN89408		54.6	6.50	2	8.0	8.0	171	1	1.3				MJ	MI		MJ		MJ	MI	MJ	MI	MJ		
ND671		56.5	5.50	7	8.5	8.5	179	2	2.3			MI	MI	MJ				MJ						
ND673		58.2	5.25	9	8.5	9.0	181	2	2.3				MJ			MI		MJ						
ND675		59.3	5.25	9	8.5	9.0	189	2	3.0				MI					MJ						
ND681		57.6	5.00	7	8.5	8.0	187	2	2.7	MJ	MI			MI				MJ						
ND682		59.0	5.25	5	8.0	8.0	176	2	2.7				MI	MI				MJ		MI				
XW398A4		59.3	7.50	9	9.5	7.5	193	1	2.3	MI			MI	MI				MJ	MI				MI	
XW397A3		56.5	5.75	7	8.0	8.5	180	1	2.7				MI					MJ	MI					
N87-0306		55.5	7.50	7	8.0	8.5	181	1	1.3	MI			MJ	MJ		MJ		MJ	MI					
N88-0022		53.2	6.50	5	8.5	8.0	169	1	1.3	MI			MJ	MJ		MJ		MI	MJ	MI	MI			
N88-3136		59.0	5.00	9	8.0	8.0	182	2	3.0				MI					MJ						
N88-3034		59.6	3.50	7	8.0	8.0	183	2	3.3	MI	MI							MJ						
N86-0348		55.0	5.25	5	8.0	8.0	164	2	1.7				MJ	MJ		MJ		MI	MJ		MI			
MT8849		54.3	8.25	0	8.5	7.0	158	1	1.3				MJ	MI		MJ			MJ	MJ	MJ			MI
BW148		57.9	4.25	5	8.5	7.5	164	2	3.3										MJ		MI			MI
BW150		53.2	4.50	2	8.0	7.0	168	1	2.3				MI			MI		MI	MJ		MJ			MI
BW152		51.3	4.75	0	8.0	7.0	150	1	1.7				MJ			MJ		MJ	MJ		MJ			MI
PH986-61		50.3	9.50	0	8.5	7.0	152	1	1.3				MJ	MJ		MJ		MJ	MJ	MJ	MJ			MI
TR983-239		56.6	3.75	5	8.0	8.5	175	1	1.3				MJ	MI		MJ		MJ	MJ		MI			

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	24.3	8	13.9	66.2	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	7.5	7.5	146
MAJOR FAULTING VALUES	56.9	21.3	18	12.9	64.2	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	5.0	5.0	136

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 52

VARIETY=BUTTE 86

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.50	1.13	58.70	60.30	1.28	1.90
K_WT	29.20	2.83	27.20	31.20	8.00	9.69
LG	22.00	14.14	12.00	32.00	200.00	64.28
SM	1.50	0.71	1.00	2.00	0.50	47.14
WHT_ASH	1.51	0.17	1.39	1.63	0.03	11.24
WHT_PRO	14.45	1.63	13.30	15.60	2.65	11.25
HARD	89.50	10.61	82.00	97.00	112.50	11.85
EXTR	67.05	0.78	66.50	67.60	0.60	1.16
FL_ASH	0.43	0.06	0.38	0.47	0.00	14.97
FL_PRO	13.40	1.41	12.40	14.40	2.00	10.55
MIXO	3.00	1.41	2.00	4.00	2.00	47.14
BAKE_ABS	60.55	1.77	59.30	61.80	3.13	2.92
LOAF_VOL	174.50	4.95	171.00	178.00	24.50	2.84

VARIETY=BW148

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.35	1.48	59.30	61.40	2.21	2.46
K_WT	29.90	4.10	27.00	32.80	16.82	13.72
LG	32.50	31.82	10.00	55.00	1012.50	97.91
SM	0.00	0.00	0.00	0.00	0.00	.
WHT_ASH	1.51	0.16	1.40	1.62	0.02	10.30
WHT_PRO	15.05	1.34	14.10	16.00	1.81	8.93
HARD	93.50	13.44	84.00	103.00	180.50	14.37
EXTR	68.40	0.42	68.10	68.70	0.18	0.62
FL_ASH	0.46	0.07	0.41	0.51	0.01	15.37
FL_PRO	14.40	0.99	13.70	15.10	0.98	6.87
MIXO	2.50	0.71	2.00	3.00	0.50	28.28
BAKE_ABS	58.95	1.48	57.90	60.00	2.21	2.52
LOAF_VOL	174.00	14.14	164.00	184.00	200.00	8.13

VARIETY=BW150

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.00	1.13	58.20	59.80	1.28	1.92
K_WT	27.15	2.47	25.40	28.90	6.13	9.12
LG	13.00	12.73	4.00	22.00	162.00	97.91
SM	1.00	1.41	0.00	2.00	2.00	141.42
WHT_ASH	1.50	0.19	1.36	1.63	0.04	12.77
WHT_PRO	14.70	1.70	13.50	15.90	2.88	11.54
HARD	90.50	7.78	85.00	96.00	60.50	8.59
EXTR	67.00	0.00	67.00	67.00	0.00	0.00
FL_ASH	0.45	0.05	0.41	0.48	0.00	11.12
FL_PRO	13.85	1.34	12.90	14.80	1.81	9.70
MIXO	1.50	0.71	1.00	2.00	0.50	47.14
BAKE_ABS	55.40	3.11	53.20	57.60	9.68	5.62
LOAF_VOL	178.50	14.85	168.00	189.00	220.50	8.32

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 53

VARIETY=BW152

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.75	0.92	59.10	60.40	0.85	1.54
K_WT	28.40	3.11	26.20	30.60	9.68	10.96
LG	23.50	23.33	7.00	40.00	544.50	99.30
SM	2.00	0.00	2.00	2.00	0.00	0.00
WHT ASH	1.48	0.12	1.40	1.57	0.01	8.09
WHT PRO	14.25	2.76	12.30	16.20	7.60	19.35
HARD	83.50	17.68	71.00	96.00	312.50	21.17
EXTR	68.00	0.99	67.30	68.70	0.98	1.46
FL ASH	0.42	0.06	0.37	0.46	0.00	15.33
FL PRO	13.65	2.33	12.00	15.30	5.45	17.09
MIXO	1.00	0.00	1.00	1.00	0.00	0.00
BAKE ABS	53.75	3.46	51.30	56.20	12.01	6.45
LOAF VOL	167.50	24.75	150.00	185.00	612.50	14.78

VARIETY=CHRIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	54.65	3.32	52.30	57.00	11.05	6.08
K_WT	26.00	4.67	22.70	29.30	21.78	17.95
LG	5.50	0.71	5.00	6.00	0.50	12.86
SM	7.50	4.95	4.00	11.00	24.50	66.00
WHT_ASH	1.60	0.16	1.49	1.71	0.02	9.72
WHT_PRO	15.15	0.92	14.50	15.80	0.84	6.07
HARD	85.50	0.71	85.00	86.00	0.50	0.83
EXTR	63.80	3.39	61.40	66.20	11.52	5.32
FL_ASH	0.49	0.07	0.44	0.54	0.01	14.43
FL_PRO	14.90	0.28	14.70	15.10	0.08	1.90
MIXO	3.00	0.00	3.00	3.00	0.00	0.00
BAKE_ABS	60.50	4.53	57.30	63.70	20.48	7.48
LOAF_VOL	194.00	28.28	174.00	214.00	800.00	14.58

VARIETY=ERA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.60	2.55	55.80	59.40	6.48	4.42
K_WT	24.60	1.84	23.30	25.90	3.38	7.47
LG	9.00	8.49	3.00	15.00	72.00	94.28
SM	9.50	9.19	3.00	16.00	84.50	96.76
WHT_ASH	1.57	0.28	1.38	1.77	0.08	17.51
WHT_PRO	13.45	1.91	12.10	14.80	3.65	14.19
HARD	82.50	9.19	76.00	89.00	84.50	11.14
EXTR	68.30	2.40	66.60	70.00	5.78	3.52
FL_ASH	0.47	0.09	0.40	0.53	0.01	19.77
FL_PRO	12.60	1.84	11.30	13.90	3.38	14.59
MIXO	2.50	2.12	1.00	4.00	4.50	84.85
BAKE_ABS	56.35	6.72	51.60	61.10	45.13	11.92
LOAF_VOL	180.50	33.23	157.00	204.00	1104.50	18.41

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 54

VARIETY=MARQUIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.10	0.71	56.60	57.60	0.50	1.24
K_WT	26.00	0.71	25.50	26.50	0.50	2.72
LG	18.50	6.36	14.00	23.00	40.50	34.40
SM	2.00	2.83	0.00	4.00	8.00	141.42
WHT_ASH	1.69	0.13	1.60	1.79	0.02	7.93
WHT_PRO	16.15	0.92	15.50	16.80	0.84	5.69
HARD	84.50	13.44	75.00	94.00	180.50	15.90
EXTR	65.70	0.00	65.70	65.70	0.00	0.00
FL_ASH	0.50	0.06	0.46	0.55	0.00	12.60
FL_PRO	15.75	0.35	15.50	16.00	0.13	2.24
MIXO	4.50	0.71	4.00	5.00	0.50	15.71
BAKE_ABS	59.90	1.27	59.00	60.80	1.62	2.12
LOAF_VOL	186.00	15.56	175.00	197.00	242.00	8.36

VARIETY=MN88076

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.05	1.34	58.10	60.00	1.81	2.28
K_WT	29.25	2.76	27.30	31.20	7.61	9.43
LG	31.00	15.56	20.00	42.00	242.00	50.18
SM	1.50	0.71	1.00	2.00	0.50	47.14
WHT_ASH	1.51	0.17	1.39	1.63	0.03	11.24
WHT_PRO	14.25	1.06	13.50	15.00	1.13	7.44
HARD	90.50	6.36	86.00	95.00	40.50	7.03
EXTR	68.55	1.20	67.70	69.40	1.44	1.75
FL_ASH	0.43	0.06	0.39	0.47	0.00	13.16
FL_PRO	13.15	0.49	12.80	13.50	0.25	3.76
MIXO	2.50	0.71	2.00	3.00	0.50	28.28
BAKE_ABS	57.40	1.70	56.20	58.60	2.88	2.96
LOAF_VOL	183.00	7.07	178.00	188.00	50.00	3.86

VARIETY=MN88334

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.00	0.99	58.30	59.70	0.98	1.68
K_WT	24.50	1.27	23.60	25.40	1.62	5.20
LG	6.50	2.12	5.00	8.00	4.50	32.64
SM	7.50	3.54	5.00	10.00	12.50	47.14
WHT ASH	1.46	0.22	1.31	1.62	0.05	14.96
WHT_PRO	14.05	1.48	13.00	15.10	2.20	10.57
HARD	84.00	4.24	81.00	87.00	18.00	5.05
EXTR	69.10	1.98	67.70	70.50	3.92	2.87
FL_ASH	0.41	0.08	0.35	0.47	0.01	20.70
FL_PRO	13.35	0.92	12.70	14.00	0.85	6.89
MIXO	2.00	0.00	2.00	2.00	0.00	0.00
BAKE_ABS	56.70	1.70	55.50	57.90	2.88	2.99
LOAF_VOL	176.50	10.61	169.00	184.00	112.50	6.01

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 55

VARIETY=MN88415

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.65	1.20	59.80	61.50	1.45	1.98
K_WT	32.95	2.62	31.10	34.80	6.84	7.94
LG	21.00	15.56	10.00	32.00	242.00	74.08
SM	0.00	0.00	0.00	0.00	0.00	.
WHT_ASH	1.47	0.18	1.35	1.60	0.03	11.98
WHT_PRO	14.30	1.13	13.50	15.10	1.28	7.91
HARD	90.50	10.61	83.00	98.00	112.50	11.72
EXTR	66.95	0.21	66.80	67.10	0.05	0.32
FL_ASH	0.43	0.07	0.38	0.48	0.01	16.44
FL_PRO	13.55	0.78	13.00	14.10	0.60	5.74
MIXO	2.00	0.00	2.00	2.00	0.00	0.00
BAKE_ABS	57.05	0.78	56.50	57.60	0.60	1.36
LOAF_VOL	170.00	4.24	167.00	173.00	18.00	2.50

VARIETY=MN89028

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.95	0.78	58.40	59.50	0.61	1.32
K_WT	30.10	1.13	29.30	30.90	1.28	3.76
LG	22.50	12.02	14.00	31.00	144.50	53.43
SM	2.00	1.41	1.00	3.00	2.00	70.71
WHT ASH	1.48	0.22	1.33	1.64	0.05	14.76
WHT_PRO	14.00	1.70	12.80	15.20	2.88	12.12
HARD	80.50	14.85	70.00	91.00	220.50	18.45
EXTR	64.60	0.99	63.90	65.30	0.98	1.53
FL_ASH	0.44	0.06	0.39	0.48	0.00	14.63
FL_PRO	13.20	1.13	12.40	14.00	1.28	8.57
MIXO	2.50	0.71	2.00	3.00	0.50	28.28
BAKE_ABS	58.10	2.69	56.20	60.00	7.22	4.62
LOAF VOL	188.50	20.51	174.00	203.00	420.50	10.88

VARIETY=MN89408

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.25	2.90	54.20	58.30	8.40	5.15
K_WT	25.20	0.57	24.80	25.60	0.32	2.24
LG	10.00	2.83	8.00	12.00	8.00	28.28
SM	9.00	4.24	6.00	12.00	18.00	47.14
WHT ASH	1.59	0.35	1.35	1.84	0.12	21.72
WHT_PRO	14.15	2.33	12.50	15.80	5.45	16.49
HARD	96.00	9.90	89.00	103.00	98.00	10.31
EXTR	64.95	0.64	64.50	65.40	0.40	0.98
FL_ASH	0.53	0.10	0.46	0.60	0.01	18.68
FL_PRO	12.95	2.05	11.50	14.40	4.21	15.83
MIXO	2.50	0.71	2.00	3.00	0.50	28.28
BAKE ABS	57.55	4.17	54.60	60.50	17.41	7.25
LOAF VOL	192.00	29.70	171.00	213.00	882.00	15.47

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 56

VARIETY=MT8849

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.05	0.78	58.50	59.60	0.60	1.32
K WT	29.50	4.95	26.00	33.00	24.50	16.78
LG	21.50	21.92	6.00	37.00	480.50	101.95
SM	1.50	0.71	1.00	2.00	0.50	47.14
WHT_ASH	1.55	0.21	1.40	1.69	0.04	13.27
WHT_PRO	13.85	1.91	12.50	15.20	3.65	13.78
HARD	94.00	5.66	90.00	98.00	32.00	6.02
EXTR	65.70	1.41	64.70	66.70	2.00	2.15
FL ASH	0.44	0.04	0.41	0.47	0.00	9.64
FL_PRO	12.80	1.98	11.40	14.20	3.92	15.47
MIXO	4.00	1.41	3.00	5.00	2.00	35.36
BAKE_ABS	57.40	4.38	54.30	60.50	19.22	7.64
LOAF_VOL	180.00	31.11	158.00	202.00	968.00	17.28

VARIETY=ND671

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.00	1.27	60.10	61.90	1.62	2.09
K_WT	26.85	4.60	23.60	30.10	21.13	17.12
LG	17.50	19.09	4.00	31.00	364.50	109.10
SM	2.00	2.83	0.00	4.00	8.00	141.42
WHT_ASH	1.51	0.17	1.39	1.63	0.03	11.24
WHT_PRO	14.95	1.48	13.90	16.00	2.21	9.93
HARD	71.00	16.97	59.00	83.00	288.00	23.90
EXTR	65.40	3.96	62.60	68.20	15.68	6.05
FL ASH	0.39	0.06	0.35	0.43	0.00	14.50
FL_PRO	14.70	1.70	13.50	15.90	2.88	11.54
MIXO	3.50	0.71	3.00	4.00	0.50	20.20
BAKE_ABS	60.25	5.30	56.50	64.00	28.13	8.80
LOAF_VOL	189.00	14.14	179.00	199.00	200.00	7.48

VARIETY=ND673

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.45	0.49	59.10	59.80	0.24	0.83
K_WT	27.95	1.91	26.60	29.30	3.64	6.83
LG	19.50	9.19	13.00	26.00	84.50	47.14
SM	2.00	2.83	0.00	4.00	8.00	141.42
WHT_ASH	1.47	0.22	1.32	1.63	0.05	14.86
WHT_PRO	14.45	2.19	12.90	16.00	4.81	15.17
HARD	80.00	7.07	75.00	85.00	50.00	8.84
EXTR	66.95	0.21	66.80	67.10	0.05	0.32
FL_ASH	0.40	0.07	0.35	0.45	0.01	17.68
FL_PRO	14.05	2.05	12.60	15.50	4.21	14.60
MIXO	4.50	0.71	4.00	5.00	0.50	15.71
BAKE ABS	60.35	3.04	58.20	62.50	9.25	5.04
LOAF VOL	192.00	15.56	181.00	203.00	242.00	8.10

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 57

VARIETY=ND675

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.70	0.28	60.50	60.90	0.08	0.47
K_WT	29.00	1.13	28.20	29.80	1.28	3.90
LG	25.00	7.07	20.00	30.00	50.00	28.28
SM	2.00	1.41	1.00	3.00	2.00	70.71
WHT_ASH	1.52	0.22	1.36	1.67	0.05	14.47
WHT_PRO	15.05	1.77	13.80	16.30	3.12	11.75
HARD	87.00	7.07	82.00	92.00	50.00	8.13
EXTR	67.45	0.92	66.80	68.10	0.85	1.36
FL_ASH	0.47	0.12	0.38	0.55	0.01	25.85
FL_PRO	14.50	1.70	13.30	15.70	2.88	11.70
MIXO	3.50	0.71	3.00	4.00	0.50	20.20
BAKE_ABS	60.05	1.06	59.30	60.80	1.13	1.77
LOAF_VOL	196.00	9.90	189.00	203.00	98.00	5.05

VARIETY=ND681

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.65	1.63	56.50	58.80	2.64	2.82
K_WT	26.55	4.31	23.50	29.60	18.60	16.25
LG	13.50	12.02	5.00	22.00	144.50	89.04
SM	4.00	2.83	2.00	6.00	8.00	70.71
WHT_ASH	1.60	0.19	1.46	1.73	0.04	11.97
WHT_PRO	15.25	1.63	14.10	16.40	2.64	10.66
HARD	82.50	20.51	68.00	97.00	420.50	24.86
EXTR	66.70	2.83	64.70	68.70	8.00	4.24
FL_ASH	0.42	0.06	0.38	0.46	0.00	13.47
FL_PRO	14.90	1.41	13.90	15.90	2.00	9.49
MIXO	3.50	0.71	3.00	4.00	0.50	20.20
BAKE_ABS	59.50	2.69	57.60	61.40	7.22	4.52
LOAF_VOL	191.00	5.66	187.00	195.00	32.00	2.96

VARIETY=ND682

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.15	1.20	59.30	61.00	1.45	2.00
K_WT	26.30	2.26	24.70	27.90	5.12	8.60
LG	9.50	7.78	4.00	15.00	60.50	81.88
SM	4.00	4.24	1.00	7.00	18.00	106.07
WHT_ASH	1.60	0.18	1.47	1.73	0.03	11.49
WHT_PRO	14.75	1.63	13.60	15.90	2.65	11.03
HARD	84.50	7.78	79.00	90.00	60.50	9.20
EXTR	65.55	1.34	64.60	66.50	1.81	2.05
FL_ASH	0.43	0.06	0.38	0.47	0.00	14.97
FL_PRO	14.20	1.27	13.30	15.10	1.62	8.96
MIXO	4.00	0.00	4.00	4.00	0.00	0.00
BAKE_ABS	60.05	1.48	59.00	61.10	2.20	2.47
LOAF_VOL	182.50	9.19	176.00	189.00	84.50	5.04

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 58

VARIETY=N86-0348

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.45	3.18	54.20	58.70	10.13	5.64
K_WT	25.25	1.06	24.50	26.00	1.13	4.20
LG	13.50	3.54	11.00	16.00	12.50	26.19
SM	5.50	3.54	3.00	8.00	12.50	64.28
WHT_ASH	1.59	0.35	1.34	1.84	0.13	22.24
WHT_PRO	14.35	2.62	12.50	16.20	6.84	18.23
HARD	78.50	7.78	73.00	84.00	60.50	9.91
EXTR	61.70	0.00	61.70	61.70	0.00	0.00
FL_ASH	0.46	0.07	0.41	0.51	0.01	15.37
FL_PRO	13.80	2.69	11.90	15.70	7.22	19.47
MIXO	2.50	0.71	2.00	3.00	0.50	28.28
BAKE_ABS	59.35	6.15	55.00	63.70	37.85	10.37
LOAF_VOL	181.50	24.75	164.00	199.00	612.50	13.64

VARIETY=N87-0306

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.30	0.42	57.00	57.60	0.18	0.74
K_WT	27.60	1.56	26.50	28.70	2.42	5.64
LG	16.00	11.31	8.00	24.00	128.00	70.71
SM	4.00	1.41	3.00	5.00	2.00	35.36
WHT_ASH	1.54	0.22	1.38	1.69	0.05	14.28
WHT_PRO	14.15	2.33	12.50	15.80	5.45	16.49
HARD	81.00	16.97	69.00	93.00	288.00	20.95
EXTR	64.10	5.09	60.50	67.70	25.92	7.94
FL_ASH	0.41	0.04	0.38	0.44	0.00	10.35
FL_PRO	13.55	2.19	12.00	15.10	4.81	16.18
MIXO	4.50	0.71	4.00	5.00	0.50	15.71
BAKE_ABS	58.80	4.67	55.50	62.10	21.78	7.94
LOAF_VOL	201.50	28.99	181.00	222.00	840.50	14.39

VARIETY=N88-0022

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.80	1.27	57.90	59.70	1.62	2.16
K_WT	30.50	0.85	29.90	31.10	0.72	2.78
LG	47.50	17.68	35.00	60.00	312.50	37.22
SM	1.00	1.41	0.00	2.00	2.00	141.42
WHT_ASH	1.50	0.19	1.36	1.63	0.04	12.77
WHT_PRO	13.30	2.12	11.80	14.80	4.50	15.95
HARD	70.00	14.14	60.00	80.00	200.00	20.20
EXTR	64.40	4.95	60.90	67.90	24.50	7.69
FL_ASH	0.43	0.05	0.39	0.46	0.00	11.65
FL_PRO	12.40	1.56	11.30	13.50	2.42	12.55
MIXO	2.00	0.00	2.00	2.00	0.00	0.00
BAKE_ABS	56.40	4.53	53.20	59.60	20.48	8.02
LOAF_VOL	182.00	18.38	169.00	195.00	338.00	10.10

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 59

VARIETY=N88-3034

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.75	0.92	57.10	58.40	0.85	1.59
K_WT	26.90	5.09	23.30	30.50	25.92	18.93
LG	21.50	23.33	5.00	38.00	544.50	108.53
SM	1.50	2.12	0.00	3.00	4.50	141.42
WHT_ASH	1.62	0.25	1.44	1.80	0.06	15.71
WHT_PRO	15.40	1.41	14.40	16.40	2.00	9.18
HARD	91.50	4.95	88.00	95.00	24.50	5.41
EXTR	68.10	0.28	67.90	68.30	0.08	0.42
FL_ASH	0.45	0.06	0.41	0.49	0.00	12.57
FL_PRO	14.90	0.85	14.30	15.50	0.72	5.69
MIXO	2.00	1.41	1.00	3.00	2.00	70.71
BAKE_ABS	59.60	0.00	59.60	59.60	0.00	0.00
LOAF_VOL	193.50	14.85	183.00	204.00	220.50	7.67

VARIETY=N88-3136

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.70	0.57	60.30	61.10	0.32	0.93
K_WT	27.55	4.45	24.40	30.70	19.85	16.17
LG	27.50	26.16	9.00	46.00	684.50	95.14
SM	1.50	0.71	1.00	2.00	0.50	47.14
WHT_ASH	1.51	0.25	1.33	1.69	0.06	16.86
WHT_PRO	14.40	1.56	13.30	15.50	2.42	10.80
HARD	82.50	12.02	74.00	91.00	144.50	14.57
EXTR	67.75	1.34	66.80	68.70	1.81	1.98
FL_ASH	0.43	0.06	0.38	0.47	0.00	14.97
FL_PRO	13.70	0.99	13.00	14.40	0.98	7.23
MIXO	2.50	0.71	2.00	3.00	0.50	28.28
BAKE_ABS	59.65	0.92	59.00	60.30	0.84	1.54
LOAF_VOL	197.50	21.92	182.00	213.00	480.50	11.10

VARIETY=PH986-61

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.05	0.07	59.00	59.10	0.00	0.12
K_WT	37.10	0.14	37.00	37.20	0.02	0.38
LG	49.00	7.07	44.00	54.00	50.00	14.43
SM	0.50	0.71	0.00	1.00	0.50	141.42
WHT_ASH	1.44	0.24	1.27	1.61	0.06	16.70
WHT_PRO	13.20	3.11	11.00	15.40	9.68	23.57
HARD	68.00	8.49	62.00	74.00	72.00	12.48
EXTR	63.15	4.45	60.00	66.30	19.84	7.05
FL_ASH	0.41	0.03	0.39	0.43	0.00	6.90
FL_PRO	12.80	3.25	10.50	15.10	10.58	25.41
MIXO	3.00	2.83	1.00	5.00	8.00	94.28
BAKE_ABS	55.70	7.64	50.30	61.10	58.32	13.71
LOAF_VOL	182.50	43.13	152.00	213.00	1860.50	23.63

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 60

VARIETY=SD3056

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.20	0.57	57.80	58.60	0.32	0.97
K_WT	28.95	3.75	26.30	31.60	14.05	12.95
LG	25.00	8.49	19.00	31.00	72.00	33.94
SM	1.50	0.71	1.00	2.00	0.50	47.14
WHT_ASH	1.52	0.21	1.37	1.66	0.04	13.54
WHT_PRO	14.50	2.12	13.00	16.00	4.50	14.63
HARD	83.50	0.71	83.00	84.00	0.50	0.85
EXTR	67.05	1.06	66.30	67.80	1.13	1.58
FL_ASH	0.47	0.06	0.42	0.51	0.00	13.69
FL_PRO	13.85	2.33	12.20	15.50	5.45	16.85
MIXO	2.50	0.71	2.00	3.00	0.50	28.28
BAKE_ABS	58.90	0.99	58.20	59.60	0.98	1.68
LOAF_VOL	184.50	14.85	174.00	195.00	220.50	8.05

VARIETY=SD8070

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.55	2.19	58.00	61.10	4.80	3.68
K_WT	28.30	1.56	27.20	29.40	2.42	5.50
LG	14.50	4.95	11.00	18.00	24.50	34.14
SM	1.00	1.41	0.00	2.00	2.00	141.42
WHT_ASH	1.45	0.24	1.28	1.62	0.06	16.58
WHT_PRO	14.55	1.34	13.60	15.50	1.81	9.23
HARD	88.50	13.44	79.00	98.00	180.50	15.18
EXTR	67.65	0.92	67.00	68.30	0.84	1.36
FL_ASH	0.42	0.10	0.35	0.49	0.01	23.57
FL_PRO	13.90	1.13	13.10	14.70	1.28	8.14
MIXO	2.50	0.71	2.00	3.00	0.50	28.28
BAKE_ABS	59.20	2.26	57.60	60.80	5.12	3.82
LOAF_VOL	183.00	1.41	182.00	184.00	2.00	0.77

VARIETY=SD8072

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.95	2.19	58.40	61.50	4.81	3.66
K_WT	31.25	4.45	28.10	34.40	19.85	14.26
LG	40.00	29.70	19.00	61.00	882.00	74.25
SM	3.00	4.24	0.00	6.00	18.00	141.42
WHT_ASH	1.50	0.16	1.38	1.61	0.03	10.88
WHT_PRO	14.05	1.06	13.30	14.80	1.13	7.55
HARD	89.50	12.02	81.00	98.00	144.50	13.43
EXTR	69.60	0.00	69.60	69.60	0.00	0.00
FL_ASH	0.45	0.06	0.40	0.49	0.00	14.30
FL_PRO	13.10	0.71	12.60	13.60	0.50	5.40
MIXO	2.50	0.71	2.00	3.00	0.50	28.28
BAKE_ABS	58.45	1.63	57.30	59.60	2.65	2.78
LOAF_VOL	175.00	7.07	170.00	180.00	50.00	4.04

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 61

VARIETY=SD8073

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.30	2.26	57.70	60.90	5.12	3.82
K WT	30.25	4.17	27.30	33.20	17.41	13.79
LG	30.00	25.46	12.00	48.00	648.00	84.85
SM	2.00	1.41	1.00	3.00	2.00	70.71
WHT ASH	1.49	0.16	1.38	1.60	0.02	10.44
WHT_PRO	14.30	0.71	13.80	14.80	0.50	4.94
HARD	90.50	13.44	81.00	100.00	180.50	14.85
EXTR	68.35	1.20	67.50	69.20	1.44	1.76
FL_ASH	0.46	0.06	0.42	0.50	0.00	12.30
FL_PRO	13.55	0.07	13.50	13.60	0.00	0.52
MIXO	3.00	1.41	2.00	4.00	2.00	47.14
BAKE_ABS	60.00	2.55	58.20	61.80	6.48	4.24
LOAF VOL	168.50	0.71	168.00	169.00	0.50	0.42

VARIETY=SD8074

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.20	2.83	57.20	61.20	8.00	4.78
K_WT	27.65	3.18	25.40	29.90	10.13	11.51
LG	14.00	9.90	7.00	21.00	98.00	70.71
SM	0.50	0.71	0.00	1.00	0.50	141.42
WHT_ASH	1.45	0.21	1.31	1.60	0.04	14.09
WHT_PRO	14.90	0.85	14.30	15.50	0.72	5.69
HARD	88.00	19.80	74.00	102.00	392.00	22.50
EXTR	66.55	0.92	65.90	67.20	0.85	1.38
FL ASH	0.47	0.08	0.41	0.53	0.01	18.05
FL PRO	14.20	0.00	14.20	14.20	0.00	0.00
MIXO	3.50	2.12	2.00	5.00	4.50	60.61
BAKE ABS	59.50	2.69	57.60	61.40	7.22	4.52
LOAF VOL	175.00	7.07	170.00	180.00	50.00	4.04

VARIETY=STOA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.65	0.35	59.40	59.90	0.13	0.59
K_WT	28.50	3.25	26.20	30.80	10.58	11.41
LG	17.50	13.44	8.00	27.00	180.50	76.77
SM	0.50	0.71	0.00	1.00	0.50	141.42
WHT_ASH	1.54	0.16	1.42	1.65	0.03	10.60
WHT_PRO	14.25	1.91	12.90	15.60	3.65	13.40
HARD	88.50	0.71	88.00	89.00	0.50	0.80
EXTR	69.00	0.85	68.40	69.60	0.72	1.23
FL_ASH	0.40	0.06	0.36	0.44	0.00	14.14
FL_PRO	13.65	1.77	12.40	14.90	3.13	12.95
MIXO	3.50	0.71	3.00	4.00	0.50	20.20
BAKE ABS	60.60	3.96	57.80	63.40	15.68	6.53
LOAF VOL	182.00	14.14	172.00	192.00	200.00	7.77

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 62

VARIETY=TR983-239

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.10	1.70	59.90	62.30	2.88	2.78
K_WT	39.50	1.70	38.30	40.70	2.88	4.30
LG	57.00	9.90	50.00	64.00	98.00	17.37
SM	0.50	0.71	0.00	1.00	0.50	141.42
WHT_ASH	1.47	0.21	1.33	1.62	0.04	13.90
WHT_PRO	13.70	2.40	12.00	15.40	5.78	17.55
HARD	82.00	0.00	82.00	82.00	0.00	0.00
EXTR	64.85	0.07	64.80	64.90	0.01	0.11
FL_ASH	0.45	0.08	0.39	0.50	0.01	17.48
FL_PRO	12.55	2.47	10.80	14.30	6.13	19.72
MIXO	2.00	1.41	1.00	3.00	2.00	70.71
BAKE_ABS	59.35	3.89	56.60	62.10	15.13	6.55
LOAF_VOL	186.50	16.26	175.00	198.00	264.50	8.72

VARIETY=XW397A3

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.60	0.57	58.20	59.00	0.32	0.97
K_WT	26.50	2.40	24.80	28.20	5.78	9.07
LG	17.50	9.19	11.00	24.00	84.50	52.53
SM	3.00	1.41	2.00	4.00	2.00	47.14
WHT_ASH	1.57	0.19	1.43	1.70	0.04	12.20
WHT_PRO	14.65	1.06	13.90	15.40	1.13	7.24
HARD	98.50	0.71	98.00	99.00	0.50	0.72
EXTR	67.40	0.14	67.30	67.50	0.02	0.21
FL_ASH	0.49	0.07	0.44	0.54	0.01	14.43
FL_PRO	13.55	0.49	13.20	13.90	0.25	3.65
MIXO	3.50	0.71	3.00	4.00	0.50	20.20
BAKE_ABS	58.05	2.19	56.50	59.60	4.80	3.78
LOAF_VOL	191.00	15.56	180.00	202.00	242.00	8.14

VARIETY=XW398A4

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.75	1.20	57.90	59.60	1.44	2.05
K_WT	29.30	3.25	27.00	31.60	10.58	11.10
LG	12.50	7.78	7.00	18.00	60.50	62.23
SM	3.00	1.41	2.00	4.00	2.00	47.14
WHT_ASH	1.58	0.13	1.49	1.67	0.02	8.06
WHT_PRO	14.65	1.20	13.80	15.50	1.45	8.21
HARD	74.50	9.19	68.00	81.00	84.50	12.34
EXTR	65.50	1.56	64.40	66.60	2.42	2.38
FL_ASH	0.48	0.04	0.45	0.51	0.00	8.84
FL_PRO	14.40	0.42	14.10	14.70	0.18	2.95
MIXO	4.50	0.71	4.00	5.00	0.50	15.71
BAKE_ABS	60.55	1.77	59.30	61.80	3.13	2.92
LOAF_VOL	198.00	7.07	193.00	203.00	50.00	3.57

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=CASSELTON NURSERY=FIELD PLOTS

TABLE 63

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
92 LEN STD	S	59.3	32.3	65	0	1.62	15.3	85	4	69.0	0.36	14.4	5	4	62.2	5
STOA		59.9	30.0	47	0	1.62	13.8	84	3	68.2	0.36	13.3	5	4	59.6	3
MARSHALL		57.0	25.1	18	5	1.78	12.6	72	1	68.1	0.39	11.7	5	2	56.2	2
BUTTE 86		61.0	37.3	70	0	1.51	14.4	99	4	67.4	0.38	13.0	5	4	62.1	3
LEN		59.2	30.3	50	0	1.63	13.9	79	3	69.3	0.39	13.3	5	4	60.5	5
GRANDIN		60.9	37.6	74	0	1.59	14.1	90	4	67.0	0.41	13.4	5	4	62.7	4

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=CASSELTON NURSERY=FIELD PLOTS

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
92 LEN STD	S	62.1	4.00	9	80	80	985	4	4.0															MI
STOA		59.3	3.25	7	85	85	910	1	2.7				MI		MI						MJ			MJ
MARSHALL		55.9	3.00	5	80	80	810	1	1.3		MI	MJ		MJ			MJ		MI	MJ		MI		MI MJ
BUTTE 86		61.6	2.00	5	80	80	830	1	3.0											MI	MI	MI		MI MJ
LEN		60.1	4.00	7	80	75	925	1	2.7					MI						MJ				MI MJ
GRANDIN		62.2	3.25	7	85	80	925	2	3.3															MI MJ

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	30.2	8	13.9	66.9	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	964
MAJOR FAULTING VALUES	56.9	27.2	18	12.9	64.9	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	954

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=LANGDON NURSERY=FIELD PLOTS

TABLE 64

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
92 LEN STD	S	59.3	32.3	65	0	1.62	15.3	85	4	69.0	0.36	14.4	5	4	62.2	5
STOA		59.3	28.9	32	3	1.78	14.5	82	4	67.2	0.40	14.0	5	4	60.0	4
MARSHALL		56.1	24.3	16	4	1.83	12.9	76	1	65.6	0.39	12.0	5	1	55.3	3
LEN		57.1	26.9	28	1	1.74	14.2	72	3	67.0	0.41	13.2	5	4	57.9	5
GRANDIN		59.8	34.2	59	1	1.60	13.6	78	3	69.1	0.39	12.9	5	3	60.0	5

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=LANGDON NURSERY=FIELD PLOTS

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES
92 LEN STD	S	62.1	4.00	9	80	80	985	4	4.0	MI
STOA		59.4	4.50	5	85	80	945	1	3.0	MI
MARSHALL		55.0	4.25	5	85	80	845	1	1.0	MJ MJ MJ MI MJ MJ MI MJ
LEN		57.4	6.75	4	75	75	850	1	2.7	MI MJ MJ MI MJ M1 M1 MJ
GRANDIN		59.3	5.00	7	80	80	885	1	2.3	MI MI MJ MI MJ

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	30.2	8	13.9	66.9	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	964
MAJOR FAULTING VALUES	56.9	27.2	18	12.9	64.9	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	954

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=MINOT NURSERY=FIELD PLOTS

TABLE 65

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
92 LEN STD	S	59.3	32.3	65	0	1.62	15.3	85	4	69.0	0.36	14.4	5	4	62.2	5
ALEX		61.9	37.6	76	0	1.40	15.3	86	4	68.0	0.33	14.7	5	4	62.1	5
COTEAU		61.0	36.1	68	0	1.47	16.4	102	4	69.0	0.35	15.3	5	4	63.4	3
GRANDIN		62.4	43.3	93	0	1.43	16.3	86	4	70.0	0.33	15.2	5	4	63.4	4
LEN		61.4	43.1	92	0	1.33	15.7	78	4	70.7	0.33	14.9	5	4	63.1	5
MARSHALL		61.5	36.8	75	0	1.37	15.2	78	4	71.4	0.32	14.2	5	4	59.3	2
STOA		61.0	38.5	80	0	1.41	15.9	90	4	69.2	0.33	15.1	5	4	63.1	3

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=MINOT NURSERY=FIELD PLOTS

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
92 LEN STD	S	62.1	4.00	9	80	80	985	4	4.0															MI
ALEX		61.8	3.50	9	85	80	970	3	3.7										MI					MI
COTEAU		63.2	2.25	7	80	85	975	3	3.7											MI				
GRANDIN		63.0	3.00	9	90	80	975	4	4.0															MI
LEN		62.8	3.50	9	85	75	1025	4	4.0															MI
MARSHALL		59.2	2.75	7	90	85	975	1	3.0									MI	MJ	MI				
STOA		62.7	3.00	9	85	80	990	4	4.0															MI

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)	DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	30.2	8	13.9	66.9	.57	12.9	3	2,7,8	61.9	5.75-8.00 2.00-2.75	6	75	80	964
MAJOR FAULTING VALUES	56.9	27.2	18	12.9	64.9	.61	12.4	2	1,9-11	60.4	UNDER 1.75 OVER 8.00	4	50	50	954

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=DICKINSON NURSERY=FIELD PLOTS

TABLE 66

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
92 LEN STD	S	59.3	32.3	65	0	1.62	15.3	85	4	69.0	0.36	14.4	5	4	62.2	5
LEN		62.9	44.4	91	0	1.52	15.7	80	4	69.2	0.35	14.7	5	4	64.4	5
GRANDIN		63.3	45.0	86	0	1.45	15.8	92	4	68.4	0.34	14.7	5	4	64.7	5
MARSHALL		62.5	37.7	79	0	1.46	14.6	89	4	70.2	0.32	13.5	5	4	60.8	2
WALDRON		61.9	42.4	86	0	1.61	16.0	90	4	67.6	0.36	14.7	5	4	61.4	3
STOA		61.2	35.7	64	0	1.45	15.0	93	4	69.0	0.34	13.8	5	4	62.1	3
COTEAU		62.3	37.3	64	0	1.55	16.5	92	4	67.7	0.37	15.7	5	4	64.7	3

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=NORTH DAKOTA STATION=DICKINSON NURSERY=FIELD PLOTS

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES
92 LEN STD	S	62.1	4.00	9	80	80	985	4	4.0	MI
LEN		63.9	3.50	9	85	70	995	4	4.0	MI
GRANDIN		64.1	3.00	7	85	80	935	2	3.3	MI MJ
MARSHALL		60.3	2.50	5	80	85	900	1	3.0	MI MJ MI MI MJ
WALDRON		60.9	2.50	5	80	80	925	1	3.0	MI MI MI MI MJ
STOA		61.7	3.25	7	80	85	950	1	3.0	MI MJ
COTEAU		64.1	2.50	7	85	85	960	2	3.3	MI MI

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	30.2	8	13.9	66.9	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	964
MAJOR FAULTING VALUES	56.9	27.2	18	12.9	64.9	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	954

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=CALIFORNIA STATION=IMPERIAL VALLEY NURSERY=FIELD PLOTS

TABLE 67

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
92 LEN STD	S	59.3	32.3	65	0	1.62	15.3	85	4	69.0	0.36	14.4	5	4	62.2	5
ANZA		59.3	28.9	26	10	1.68	12.8	75	1	68.0	0.39	11.4	5	2	56.5	2
YECORA ROJO	S	61.7	41.3	59	0	1.58	14.1	88	4	69.5	0.38	13.1	5	4	58.6	4
YOLO		60.2	28.7	26	10	1.60	12.6	66	1	70.3	0.36	11.5	5	2	57.9	2
KLASIC		62.2	41.0	67	0	1.49	13.4	71	3	72.3	0.26	12.3	5	2	55.8	3
TADINIA		58.6	29.9	23	1	1.70	13.0	82	2	66.7	0.40	11.8	5	1	54.6	2
SERRA		61.2	37.6	53	0	1.61	13.1	66	3	71.4	0.38	12.1	5	2	56.5	4
BAKER		61.5	38.8	52	1	1.51	13.8	76	3	69.6	0.35	12.8	5	3	59.0	4
EXPRESS		61.0	35.5	56	1	1.58	13.5	89	3	67.4	0.42	12.7	5	3	61.4	4
FMCBR 5144		59.9	29.1	32	5	1.58	12.2	70	1	70.5	0.34	11.1	5	2	57.6	2
CONTBR 5702		60.1	37.3	51	1	1.54	13.5	79	3	68.6	0.35	12.5	5	3	56.5	4
CONTBR 5738		59.5	34.5	31	3	1.68	14.3	84	4	66.7	0.39	13.4	5	3	57.6	4
VC 842		57.8	31.3	23	5	1.65	13.9	75	2	68.0	0.35	13.4	5	4	56.2	4
VC 844		56.5	25.7	11	11	1.80	14.3	70	2	64.1	0.44	13.5	5	2	55.3	4
PIO VARRBIO104		58.8	37.3	65	1	1.69	12.7	79	2	66.1	0.51	11.7	5	1	58.2	3
PIO VARRBI0161		61.0	34.4	51	2	1.69	13.7	80	3	66.3	0.44	12.7	5	2	59.0	3
PH986-61		61.7	41.2	70	0	1.62	14.3	87	4	69.6	0.35	13.4	5	4	59.3	4
TANORI 87W		60.0	34.8	40	4	1.64	14.1	79	4	67.0	0.38	13.2	5	3	57.9	3
VC 896		61.8	34.6	34	5	1.49	13.0	88	3	67.3	0.39	11.6	5	2	58.6	3
PH 988-131		61.5	37.7	50	1	1.57	13.9	84	3	69.4	0.36	12.7	5	3	59.6	4
CONTBR 5237		60.9	30.3	23	7	1.48	12.4	90	1	68.7	0.37	11.2	5	2	57.3	4
YECORA ROJO 90W		59.7	31.4	38	3	1.64	13.9	75	2	66.5	0.39	12.8	5	2	58.6	4
YECORABLANCO 90		58.9	28.1	31	8	1.76	14.2	87	3	65.9	0.48	13.4	5	3	59.0	4
PH988-118		62.1	36.8	56	1	1.45	12.6	88	2	69.7	0.35	11.3	5	2	52.9	4
PH988-139		59.5	36.6	43	2	1.63	14.3	89	4	68.6	0.38	13.4	5	4	57.9	4
DA989-46		58.8	28.9	26	5	1.65	13.3	92	2	68.4	0.38	12.3	5	2	56.2	3
DA989-48		61.1	34.1	63	0	1.74	14.1	83	4	66.6	0.47	13.5	5	3	60.8	4
PH989-188		61.4	35.5	56	3	1.52	13.9	77	3	69.2	0.40	13.4	5	4	60.0	4
FMCBR5678-1		59.7	35.2	46	2	1.58	13.8	80	3	68.6	0.36	13.3	5	4	57.9	3
FMCBR7076		60.6	35.0	59	2	1.60	14.0	96	4	66.4	0.37	13.1	5	3	58.2	3
FMCBR8631		60.4	36.8	53	0	1.50	13.4	71	3	68.8	0.34	12.3	5	2	56.5	3
APBW10-8		62.2	44.8	77	0	1.41	13.3	92	3	70.6	0.33	12.2	5	2	56.5	4
APBH8-2		59.0	35.5	52	2	1.48	13.1	82	3	68.8	0.37	12.4	5	2	57.6	3
APB89-1-13		62.3	38.0	63	0	1.47	12.9	83	2	70.4	0.31	12.2	5	2	57.6	3
APBH-8		61.1	38.6	59	0	1.56	13.9	76	3	68.5	0.32	12.8	5	3	58.2	3
APBH-2B		57.3	39.1	64	1	1.67	14.1	82	4	64.9	0.44	12.6	5	1	59.6	3
SUNSTAR 11		60.9	34.4	54	2	1.70	13.5	75	3	70.7	0.38	12.8	5	3	60.8	3
VC956		60.5	31.0	24	0	1.63	13.4	104	2	69.8	0.37	12.4	5	2	57.6	3
VC957		61.6	39.4	59	0	1.61	14.3	79	4	67.8	0.36	13.3	5	4	58.6	4
PIOVARRBI0106		61.2	30.7	29	5	1.52	12.9	90	1	64.5	0.46	11.8	5	1	56.2	2
PIOVARRBJ0035P		61.8	34.5	59	2	1.70	13.3	89	3	66.8	0.46	12.4	5	1	57.6	2

QUALITY DATA OF SPRING WHEAT SAMPLES 1992 CROP
STATE=CALIFORNIA STATION=IMPERIAL VALLEY NURSERY=FIELD PLOTS

TABLE 67 CONTD

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
92 LEN STD	S	62.1	4.00	9	80	80	985	4	4.0		MI												MI	
ANZA		55.7	3.00	5	85	70	670	1	1.3		MJ	MI	MJ			MJ		MI	MJ		MI		MI	MJ
YECORA ROJO	S	57.7	5.00	7	90	75	750	1	3.0										MJ				MI	MJ
YOLO		57.2	2.50	5	80	75	775	1	1.3		MJ	MI	MJ			MJ		MI	MJ	MI	MI		MI	MJ
KLASIC		54.8	6.00	7	80	70	750	1	2.0				MI			MJ			MJ	MI			MI	MJ
TADINIA		53.7	4.00	5	80	70	600	1	1.3		MJ		MI	MI		MJ		MI	MJ		MI		MI	MJ
SERRA		55.7	5.50	7	90	75	780	1	2.0				MI			MJ			MJ				MI	MJ
BAKER		58.1	5.00	7	90	75	770	1	2.3				MI			MI			MJ				MI	MJ
EXPRESS		60.5	3.75	7	80	80	860	3	3.0				MI			MI			MI				MI	
FMCBR 5144		56.8	2.75	5	80	85	770	1	1.3		MJ		MJ			MJ		MI	MJ	MI	MI			MJ
CONTBR 5702		56.0	5.50	7	85	75	780	1	2.3				MI			MI			MJ				MI	MJ
CONTBR 5738		57.0	5.00	7	85	75	770	1	2.7		MI			MI					MJ				MI	MJ
VC 842		55.6	6.00	7	85	70	700	1	2.3	MI	MJ		MI						MJ	MI			MI	MJ
VC 844		54.6	7.00	7	85	70	725	1	1.7	MJ	MJ	MI		MJ					MJ	MI			MI	MJ
PIO VARRBIO104		57.4	3.50	7	85	80	745	1	1.3				MJ	MI		MJ			MJ				MI	MJ
PIO VARRBI0161		58.4	3.50	5	85	85	725	1	2.0		MI		MI	MI		MI			MJ		MI			MJ
PH986-61		58.5	4.25	7	90	80	825	1	3.0										MJ				MI	MJ
TANORI 87W		57.0	3.75	7	85	80	790	1	2.7					MI					MJ				MI	MJ
VC 896		57.7	3.50	5	85	75	680	1	2.0		MI		MI			MJ			MJ		MI		MI	MJ
PH 988-131		59.0	4.50	7	85	80	790	1	2.3				MI			MI			MJ				MI	MJ
CONTBR 5237		56.6	5.50	7	85	75	630	1	1.3		MJ		MJ			MJ			MJ				MI	MJ
YECORA ROJO 90W		57.7	5.75	7	85	70	725	1	1.7		MJ		MI	MI		MI			MJ	MI			MI	MJ
YECORABLANCO 90		58.2	5.50	7	80	75	730	1	2.3		MJ	MI		MI					MJ				MI	MJ
PH988-118		52.1	6.50	4	80	50	550	1	1.7				MJ			MJ			MJ	MI	MJ		MJ	MJ
PH988-139		56.9	5.75	7	85	75	745	1	3.0										MJ	MI			MI	MJ
DA989-46		55.7	5.25	5	85	70	700	1	1.7		MJ		MI			MJ			MJ		MI		MI	MJ
DA989-48		60.2	4.00	7	80	85	790	1	2.7		MI			MI					MJ					MJ
PH989-188		59.3	4.00	7	85	80	850	2	3.0				MI						MJ				MI	
FMCBR5678-1		57.2	4.50	7	85	80	800	1	2.7				MI						MJ				MI	MJ
FMCBR7076		57.5	3.50	7	85	75	750	1	2.7					MI					MJ				MI	MJ
FMCBR8631		55.7	6.00	7	90	75	750	1	2.0				MI			MJ			MJ	MI			MI	MJ
APBW10-8		55.7	6.50	4	85	70	675	1	2.0				MI			MJ			MJ	MI	MJ		MI	MJ
APBH8-2		56.5	5.50	7	85	75	720	1	2.0				MI			MJ			MJ				MI	MJ
APB89-1-13		56.7	5.00	7	95	75	750	1	1.7				MJ			MJ			MJ				MI	MJ
APBH-8		57.2	5.00	7	95	75	755	1	2.3				MI			MI			MJ				MI	MJ
APBH-2B		58.4	4.75	5	85	75	720	1	2.0	MI				MJ		MI			MJ		MI		MI	MJ
SUNSTAR 11		60.0	4.00	9	85	75	825	1	2.3		MI		MI			MI			MJ				MI	MJ
VC956		56.8	4.50	5	85	65	675	1	1.7		MJ		MI			MJ			MJ		MI		MI	MJ
VC957		57.7	5.00	7	95	75	735	1	3.0										MJ				MI	MJ
PIOVARRBI0106		55.1	4.50	2	75	50	540	1	1.0		MJ		MJ	MJ		MJ		MI	MJ		MJ	MI	MJ	MJ
PIOVARRBJ0035P		56.6	4.00	2	75	65	635	1	1.7		MI		MI	MI		MJ		MI	MJ		MJ	MI	MI	MJ

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	34.7	8	13.9	67.1	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	847
MAJOR FAULTING VALUES	56.9	31.7	18	12.9	65.1	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	837

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.